THEALTH in AMERICA

A Health Policy Agenda for the Next President & Congress of the United States

Five Steps to Health in America

A Health Policy Agenda
For The Next President & Congress
Of The United States

A Proposal from the Adventist Health Policy Association To Promote Sound Health Policy In 2016 and Beyond

October 2015

www.adventisthealthpolicy.org

PREFACE

The Seventh-day Adventist commitment to fostering human health began more than 150 years ago at a time when much of what passed for medical care was in fact detrimental.

Patent medicines, often containing toxic or addictive substances, were widely offered as cures for nearly all ailments. Many medical interventions at the time – such as bloodletting, heroin for the common cold, and radium for arthritis and diabetes – caused far more harm than good.

By contrast, Adventists began to teach the value of a healthy lifestyle and a preference for natural remedies including fresh air, regular exercise and pure water. Within a few years, Adventists expanded their health ministry by establishing innovative health care institutions. The first of these opened in 1866 in Battle Creek, Michigan, where people not only received treatment for diseases but were also taught how to prevent them. Since these early beginnings, Adventists have continued to build hundreds of hospitals, nursing homes, clinics, and health-sciences schools around the world.

The Adventist work toward human health is founded on the belief that every person is a beloved child of the Creator, and deserving of compassionate, whole-person care with thoughtful attention to all dimensions of a person's life. Thus, Adventists believe that caring for physical well-being is spiritually significant, and that one of the practical implications of faith is a willingness to take responsibility for one's own health and that of one's neighbors. Our hope is that all may experience the abundance of life intended by the Creator.

In recent years, the Adventist health systems in the United States have recognized more fully the opportunity to influence health policy in order to preserve the vitality of charitable, faith-inspired health systems and to deploy effective resources for the development of whole-community health. In 2010, the Adventist Health Policy Association (AHPA) was created as their united voice for health policy priorities. In 2014, the new Loma Linda University Institute for Health Policy & Leadership began to collaborate with AHPA in this work.

People who are motivated by Christian faith understand that we must address the socially complex circumstances that frequently result in poor personal and community health. We are committed to responding to the often-inconvenient pleas for mercy and fairness. We know that such work can never be reduced to mere business exchanges. Many of the persons who most need care may have little to offer in exchange.

Adventists believe that all persons in need of health care, regardless of their social or economic status, are deserving of our care. This dedication to the principles of whole-person, whole-community care gives us the moral gravitas necessary to pursue the goals we set forth in this plan.

We invite the next President and Congress of the United States to join with us and like-minded policy makers in building a future that is healthier, equitable and more hopeful for all Americans.

Gerald R. Winslow, PhD, Director Institute for Health Policy & Leadership

Loma Linda University Health

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A Five-Point Health Policy Plan

Dear Candidate,

This book represents the collaborative efforts of the five Seventh-day Adventist health systems that comprise the Adventist Health Policy Association (AHPA).

Seventh-day Adventist hospitals represent a major sector of the U.S. health system and are the nation's largest Protestant health care providers. AHPA was formed in 2010 to serve as the united policy voice for 84 hospitals and more than 400 affiliated health care facilities across 17 states and the District of Columbia.

While we are devoted to the provision of the highest quality, evidence-based health care, we constantly seek new ways to encourage healthful living and avert preventable illness. We share a vision of whole persons living well in whole communities.

To fine-tune that vision in our new health care environment, our Adventist hospital systems held five Advisor Sessions. Their goal was to give careful consideration to the policy proposals to be presented in this book. The Advisor Sessions led to the formation of multidisciplinary writing teams whose shared perspectives led to the major themes we present here. The conversations were enriched by the diversity of professional backgrounds – nursing, physicians, pastoral care, public health, community benefit, public policy, information systems and finance. Ultimately, the conversations led to the development of a Five-Point Health Policy Plan for improving health in flourishing U.S. communities.

The book you hold includes this vision and the proposed Five-Point Plan. As you read through it, please recognize our sincere desire to foster good health through innovative health policies that increase quality, lower costs and help Americans live their lives to the fullest.

We hope our next President, Congress and other policymakers will champion these recommendations. Feel free to contact me with any questions about, or enhancements to, our vision.

Sincerely,

Richard E. Morrison, President

Adventist Health Policy Association

Richard E Morrison

Adventist Health Policy Association

The Adventist Health Policy Association (AHPA) is an affiliation of Seventh-day Adventist-sponsored health care systems across the US. Since the mid-1800s, Adventist hospitals have provided quality, faith-based health care dedicated to helping people achieve mind, body and spiritual wholeness.

The five health systems that comprise the Adventist Health Policy Association operate 84 hospitals and 400 affiliated entities – home health agencies, nursing centers, outpatient centers, physician practices and related health care services – in 17 states and the District of Columbia. Our 124,000 team members serve hundreds of thousands of hospital inpatients each year, and millions more in our outpatient centers.

AHPA's goal is to help ensure sound public policies and regulations that encourage and allow member hospitals to provide high quality, accessible health care to the communities we serve.

The AHPA Board is comprised of the Chief Executive Officers from the five systems.

The Value of Faith-based Health Care

The mission of faith-based, not-for-profit hospitals is to improve the health of our patients and communities. We seek to provide quality health care to all who come to us. We employ integrity, compassion, excellence and good stewardship. We are mission-based and locally operated. We provide low- or no-margin services, research and medical education. We re-invest our margins into the communities we serve.

Adventist Health System

CEO: Donald Jernigan (board chair)

- · 44 hospitals: 8,122 beds and 77,000 employees
- · FL, GA, TN, NC, IL, KY, KS, WI, TX and CO
- Includes Florida Hospital, the nation's largest Medicare provider
- · Adventist University of Health Sciences (FL)

Adventist Health

CEO: Scott Reiner

- · 20 hospitals: 2,890 beds and 28,600 employees
- · CA, WA, OR and HI

Adventist HealthCare

CEO: Terry Forde

- · 6 hospitals: 1,025 beds and 8,400 employees
- · MD, NJ and the District of Columbia

Kettering Health Network

CEO: Fred M. Manchur

- · 8 hospitals: 1,528 beds and 9,917 employees
- · Ohio
- · Kettering College of Health Sciences

Loma Linda University Health

CEO: Richard Hart, MD, DrPH

- · 6 hospitals: 1,076 beds and 14,745 employees
- · California
- · Loma Linda University

A CALL TO ACTION

Where are we now?

IF HEALTH IS WEALTH, THEN OUR NATION IS POOR.

"The current generation of children and young adults in the United States could become the first generation to experience shorter life spans and fewer healthy years of life than those of their parents." (Institute of Medicine, 2012)¹

The U.S. Centers for Disease Control and Prevention notes that²:

- · Nearly half of all American adults have at least one chronic health condition and a quarter suffer from two or more.
- · Half of U.S. adults are at risk for heart disease or stroke.
- · 90 percent of Americans ingest too much sodium, increasing their likelihood of high blood pressure.
- · Obesity, which increases the risk of heart disease, stroke, diabetes, cancer and other chronic conditions, affects one in five children and more than one in three adults in America.

All of these conditions are related to lifestyle choices. Overall, we are physically inactive, eat poorly, smoke tobacco, and drink too much alcohol.

There is no doubt that the United States has the most advanced technology for treating illnesses, and the great majority of medical advances come from our country. The challenge is that our culture and payment systems have focused on acute episodes of illness – and not on chronic disease, lifestyle or prevention.

The prevalence of chronic illnesses and the poor health that follow explains in part why our nation spends so much on health care. In 2012, health care consumed 42 percent of federal revenues and cost an average of \$8,915 per person – the most of any nation in the world. (The Organisation for Economic Co-operation & Development cites its average per-person cost at \$3,923 per person in its member nations.)³ In the same year, the United States spent \$2.8 trillion (or 17.2 percent of the U.S. economy) on health care – yet our chronically ill patients have less access, care coordination and safety experiences when compared to patients from Australia, Canada, France, Germany, Netherlands, New Zealand and the United Kingdom.⁴

- 1 National Public Health Week (April 2013). Public Health is ROI. Save Lives. Save Money. Retrieved from http://www.nphw.org/assets/general/uploads/Final_Comprehensive_toolkit.pdf
- 2 American Public Health Association. Center for Public Health Policy. Issue Brief (June 2012). The Prevention and Public Health Fund: A Critical Investment in Our Nation's Physical and Fiscal Health. Retrieved from https://www.apha.org/~/media/files/pdf/topics/aca/apha_prevfundbrief_june2012.ashx
- 3 Centers for Disease Control and Prevention. August 10, 2015. Heart Disease Facts. Retrieved from http://www.cdc.gov/heartdisease/facts.htm
- 4 Centers for Disease Control and Prevention. August 26, 2015. Chronic Disease Overview. Retrieved from http://www.cdc.gov/chronicdisease/overview/

Where do we need to be?

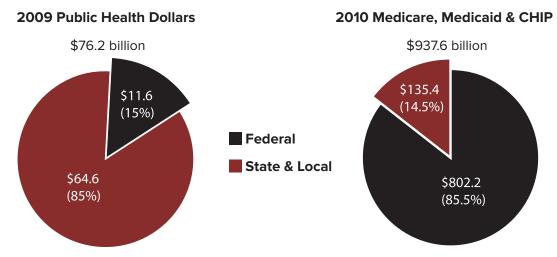
HEALTH LEADS TO WEALTH.

For too long, we have invested the bulk of our resources on treating illnesses after they occur. Our current system, aptly described by many as "sick" care rather than "health" care, focuses heavily on medical services rather than population/community health and disease prevention.

Our flawed priorities have generated an increasing financial burden on the federal budget, meaning that health care costs have emerged as an increasingly important national policy priority.

The federal share for acute care spending by Medicare, Medicaid and CHIP was 85.5 percent of the total \$937.6 billion spent in 2009.³ Conversely, the federal share of Public Health and Prevention spending just 15 percent of the \$76.2 billion spent.

Government Spending on Prevention/Public Health vs. Health Care Services



Source: CMS National Health Expenditures, 2009³

Our lack of federal investment in prevention and public health (vs. acute care spending) demonstrates a minimal commitment to "assuring conditions in which people can be healthy." 5

By switching our focus from, "What causes Disease?" to one that asks, "What causes Health?", we can rein in and reverse the trend of rising health care costs. We can strengthen our economy by improving the health of our workforce, boosting productivity, and ultimately advancing the health and quality of life of our citizens.

⁵ California HealthCare Foundation July 2014. Health Care Costs. Retrieved from http://www.chcf.org/publications/2014/07/health-care-costs-101

How do we get there?

It is time to shift our "downstream" health spending to an "upstream" focus that will make a profound and meaningful impact on the health and well-being of all Americans. Reshaping our health spending priorities will help our country build a stronger, healthier America.

The Adventist Health Policy Association proposes a Five-Point Health Policy Plan with 75 specific considerations and recommendations that focus on lifestyle choices, disease prevention and health promotion.

We are hopeful that policymakers will consider these recommendations as they shape the next generations of health and health care.

SUMMARY

THE FIVE-POINT HEALTH POLICY PLAN

To build a stronger, healthier America, the Adventist Health Policy Association proposes the following Five-Point Health Policy Plan for the next President and Congress of the United States. The five points offer considerations for reaching the Action Steps. The detail for each proposal is included later in this book.

ACTION STEP ONE

Prioritize Wellness as a Key Domestic Policy with a Broad National Focus

- 1. Maintain current federal and state investments in prevention and public health
- 2. Sustain the participation of all federal agencies in health policy, and expand attention to health within non-health agencies
- 3. Reorient public and political perception of disease prevention and wellness
- 4. Establish a White House Office of Wellness & Prevention

ACTION STEP TWO

Improve the Current Health System

- 5. Create a clearly defined population health strategy that tackles the Triple Aim, including expanded concepts of health disparities and the social determinants of health
- 6. Seize opportunities for strategic realignment between hospitals and the public health system
- 7. Rely on multisectoral collaboration to build effective partnerships that "move the needle" in community health
- 8. Modernize provider reimbursement by moving away from volume and toward quality and value of services
- 9. Expand health care coverage and reduce patient cost-sharing for primary care and preventive services
- 10. Attract and train more primary care physicians
- 11. Incentivize businesses to invest in improving public health
- 12. Foster a culture of health in the work environment
- 13. Offer well-designed, measurable worksite wellness programs
- 14. Engage workers in a long-term behavioral change
- 15. Conduct more research into the effectiveness and long-term benefits of employee incentive programs for personal health and wellness
- 16. Make these incentives part of an overall employee health strategy, not the whole strategy
- 17. Incorporate the identification of health disparities into hospital Community Health Needs Assessments

- 18. Establish policies that reward hospitals for providing measurable, long-term community health programming
- 19. Encourage collaboration among public health departments and community-based organizations (CBOs) to improve community health
- 20. Engage community members as active participants in the health system

ACTION STEP THREE

Strengthen the Public Health Infrastructure

- 21. Protect the Public Health & Prevention Trust Fund and public health infrastructure at all levels of government
- 22. Support policies that promote collaboration among health systems and public health
- 23. Support alternative funding structures and financial investments for prevention
- 24. Incentivize new data systems that integrate clinical and community health data
- 25. Reinforce ties between health systems and faith communities
- 26. Strengthen the White House and other federal government Offices of Faith-based & Neighborhood Partnerships
- 27. Reimagine school-based health centers to support students' health, well-being and academic achievement of students
- 28. Incentivize community, faith and business sectors to collaborate on improving overall community health
- 29. Increase federal funding to support a minimum 50 percent of the accredited positions for preventive medicine residency (PMR) programs
- 30. Increase federal funding for other public health training programs
- 31. Create a national task force to recommend ways to enhance the numbers and quality of the public health workforce
- 32. Create an accurate, standardized data collection system for the public health workforce, and include projection analysis to estimate future need
- 33. Be innovative in the recruitment and retention of allied health providers in rural America
- 34. Define standardized roles for allied health providers for our future health care system
- 35. Increase clear and appropriately standardized training and licensing requirements for mid-level providers
- 36. Develop standardized licensure and certification for allied health providers
- 37. Create new reimbursement structures for allied health providers
- 38. Design meaningful data systems to evaluate the comparative cost-effectiveness of allied health providers

ACTION STEP FOUR

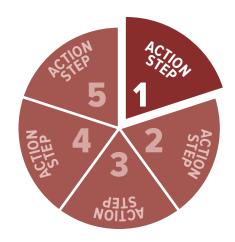
Move to People and Community-Centered Care - Integrating Mind, Body and Spirit

- 39. Create and incentivize institutions (banks, hospitals, etc.) to become anchor organizations for community health improvement efforts
- 40. Promote policies that create workplace health, safety and well-being
- 41. Improve access to preventive care and treatment for common health problems
- 42. Develop new strategies that promote equitable school resources
- 43. Use spiritual care departments within hospitals as bridging conduits between hospitals and faith communities
- 44. Raise social and theological consciousness that faith communities as well as hospitals and public health have a responsibility for community health and well-being
- 45. Urge hospitals to create pathways for faith communities to own and promote healthier lifestyles
- 46. Invest in congregational advocates who can help integrate the work of hospitals with the calling of faith and health from congregations
- 47. Develop new methods for integrating oral health education into all homes, communities and primary care providers
- 48. Develop an interoperable infrastructure that is accessible across clinical settings, and enhances the adoption of oral health core clinical competencies
- 49. Modify oral health reimbursement policies to more efficiently cover implementation and incentive costs for implementing oral health competencies
- 50. Shift the national research emphasis and funding incentives toward health promotion and disease prevention
- 51. Reduce oral health disparities
- 52. Incorporate mental health into primary care
- 53. Intervene early, especially for children with emerging mental health issues
- 54. Create alternatives to institutionalization for mental health issues
- 55. Expand tele-psychiatry
- 56. Move to patient-centered care that incorporates mental and behavioral health
- 57. Address the social determinants of mental health
- 58. Cover the provision of comprehensive care for individuals with advanced and/or serious mental illness
- 59. Develop standards for clinician-patient communication and advance care planning
- 60. Evaluate training, certification and/or licensure requirements for mental health providers
- 61. Integrate the financing of medical and social services as appropriate
- 62. Engage provider constituents and provide fact-based information to patients

ACTION STEP FIVE

Support Health in All Policies

- 63. Build safe communities that are free of crime and violence
- 64. Create community and policy opportunities for social and civic engagement
- 65. Support the healthy development of children and adolescents
- 66. Ensure opportunities for high quality, accessible education
- 67. Include "healthy homes" assessments in social service programs like Women, Infants and Children (WIC)
- 68. Continue to expand the Supplemental Nutritional Assistance Program (SNAP) benefits to include local farmers markets
- 69. Expand opportunities for high quality early childhood education and health programs
- 70. Integrate meaningful community input into health improvement efforts
- 71. Design communities to meet the needs and health of people
- 72. Develop a rich mix of uses and buildings in communities
- 73. Incorporate nature into community settings
- 74. Focus transportation on moving people rather than vehicles
- 75. Support multidisciplinary approaches to promoting healthy design principles in our communities



ACTION STEP ONE

PRIORITIZE WELLNESS AS A KEY DOMESTIC POLICY WITH A BROAD NATIONAL FOCUS

Historically, the federal government's involvement in a nationwide disease prevention and health promotion effort has been minimal. Multiple agencies – including the Centers for Medicare & Medicaid Services, the Centers for Disease Control & Prevention, the Administration on Aging, the Office of Minority Health, Indian Health Services, and the National Institutes of Health – oversee the health issues and policies of diverse populations across the United States. No single office quarterbacks federal wellness and prevention efforts.

The federal public health investment of 1.5 dollars for every 8.5 state dollars¹ means that the challenge to keep Americans free from disease is left to the states. Subsequently, disease rates and health care costs vary widely by state. Death rates for heart disease are highest in the South and lowest in the West², and health costs are higher in parts of Texas than in other states.

More money is not the answer. In our traditional system that emphasizes "sick" care rather than "health" care, 75 percent of the total health care spending goes to treating chronic diseases while only 3.1 percent is spent on preventing disease and keeping Americans healthy in the first place.³

The high cost of medical care and an unhealthy workforce can hurt the U.S. economy and its ability to

- 1 American Public Health Association. "Center for Public Health Policy." Issue Brief (June 2012). The Prevention and Public Health Fund: A Critical Investment in Our Nation's Physical and Fiscal Health. Retrieved from https://www.apha.org/~/media/files/pdf/topics/aca/apha_prevfundbrief_june2012.ashx
- 2 Centers for Disease Control and Prevention (August 10, 2015). Heart Disease Facts. Retrieved from http://www.cdc.gov/heartdisease/facts.htm
- 3 American Public Health Association. Center for Public Health Policy. Issue Brief (June 2012). The Prevention and Public Health Fund: A Critical Investment in Our Nation's Physical and Fiscal Health. Retrieved from https://www.apha.org/~/media/files/pdf/topics/aca/apha_prevfundbrief_june2012.ashx

compete in the global market. Health care is the most expensive benefit for businesses; Fortune 500 companies spend as much on health care benefit costs as they make in profits in a year.⁴ Americans miss 2.5 billion days of work due to chronic conditions, resulting in lost productivity of more than \$1 trillion.⁵ Health care spending threatens the solvency of Medicare and Medicaid, and is outpacing education as the largest state budget item each year.⁶

As they chart the course for the next four years, we hope that the next President and Congress will bring wellness and prevention into national focus. Prioritizing, aligning and investing in prevention at the national level will escalate the concepts of healthy communities and lifestyles into esteemed social values in America.

Federal Provisions for Prevention and Wellness

The provisions of the 2010 Patient Protection & Affordable Care Act (ACA) have sparked heated debate throughout the nation but, in reality, the Act promotes prevention and wellness initiatives. Still, national attention to provisions that directly or indirectly promote health has been modest.

- Title IV, Section 4001 establishes the National Prevention, Health Promotion & Public Health Council (National Prevention Council) to develop the first national strategy to prevent disease and improve health nationwide.
- Title IV, Section 4002 creates the Prevention & Public Health Fund (Prevention Fund) to provide expanded and sustained national investments in prevention and public health, to improve health outcomes, and to enhance health care quality.
- Title IV, Section 4004 provides for the planning and implementation of a national public-private partnership for a health promotion campaign to raise public awareness of health improvement opportunities across the life span.
- Title IV, Section 4104 removes barriers to preventive services in Medicare.
- · Title IV, Section 4106 improves access to preventive services for eligible adults in Medicaid.
- Title IV, Section 4201 provides Community Transformation Grants that help local communities design and carry out local programs that prevent chronic diseases such as cancer, diabetes and heart disease.

These provisions and others acknowledge the pervasiveness of chronic illness and escalating health care costs in the United States, where nearly half of all adults suffer from at least one chronic health condition and over 17 percent of national wealth is spent on health care.^{7,8} In particular, the National Prevention Council and the Prevention Fund provide pivotal opportunities to prioritize, align and invest in prevention and wellness efforts at the national level.

⁴ Stange, K.C. and Woolf, S.H. Partnership for Prevention (December 2008). Policy Options in Support of High-Value Preventive Care. Retrieved from https://www.prevent.org/data/files/initiatives/policyoptionssupporthighvaluepreventivecare.pdf

⁵ National Public Health Week (April 2013). Public Health is ROI. Save Lives. Save Money. Retrieved from http://www.nphw.org/assets/general/uploads/Final_Comprehensive_toolkit.pdf

⁶ Stange, K.C. and Woolf, S.H. Partnership for Prevention (December 2008).

⁷ Centers for Disease Control and Prevention (August 26, 2015). Chronic Disease Overview. Retrieved from http://www.cdc.gov/chronicdisease/overview/

⁸ California HealthCare Foundation (July 2014). Health Care Costs. Retrieved from http://www.chcf.org/publications/2014/07/health-care-costs-101

Maintain current federal and state investments in prevention and public health

Approximately 70 percent of chronic illnesses like heart disease and diabetes are costly to treat but largely preventable. In the United States, preventable chronic illnesses result in millions of premature deaths every year.

Addressing four health risk behaviors (tobacco use, physical inactivity, poor diet and alcohol use) could prevent almost 40 percent of all deaths⁶ including those from chronic disease. This could reduce the personal and financial burden of disease and help Americans enjoy a better quality of life. Recent research shows:

- For every 10 percent funding increase in effective community-based public health programs, one to seven percent of preventable deaths can be averted.¹⁰
- · Investing \$10 per person in proven, community-based public health efforts could result in a savings of more than \$16 billion in just five years, a \$5.60 return for every dollar invested.¹¹

In this regard, the Prevention & Public Health Fund (Prevention Fund) is noteworthy as the first mandatory funding stream and the only federal budget item dedicated to activities that improve health. For example 12:

- · In New York, the Walkers for Wellness Program brings walking clubs and healthier food programs to 100 faith-based organizations representing more than 10,000 congregants of many faiths.
- In Hamilton County, Ohio, 72 schools (38,282 students) have implemented competitive food
 policies that ensure the foods and beverages sold in schools meet nutritional standards in calories,
 nutrients and portion size.
- In San Antonio, Texas, the Bike Share Program installed 14 kiosks and bike signage in 43 locations
 to promote increased physical activity. The program results have surpassed the original goals of the
 program and inspired the city of Austin to develop plans to replicate the program.

Unfortunately, 2015 federal budget reductions diverted Prevention Fund dollars to other uses. The Sustainable Growth Rate fix diverted \$6.25 million in Fund dollars to postpone Medicare payment cuts to physicians. An additional \$73 million in prevention dollars was shifted to fund existing appropriations.

Without a stable and reliable funding source to alleviate chronic underfunding of prevention programs, our efforts to improve health outcomes and reduce health care spending will not be sustainable. Continuing investment in prevention and wellness must be protected for the physical and fiscal health of our nation.

⁹ Stange, K.C. and Woolf, S.H. Partnership for Prevention (December 2008).

¹⁰ American Public Health Association. Center for Public Health Policy. Issue Brief (June 2012).

¹¹ Trust for America's Health. Prevention for a Healthier America (July 2008). Investments in Disease Prevention Yield Significant Savings, Stronger Communities. Retrieved from http://healthyamericans.org/reports/prevention08/

¹² Trust for America's Health. The New Prevention Fund (March 2011). An Investment in the Future Health of America. Retrieved from http://healthyamericans.org/reports/prevention-fund/

Sustain the participation of all federal agencies and expand attention to health within non-health agencies

To achieve a healthier America, political and fiscal contexts should be conducive to interagency collaboration and partnerships.

Historically, no single office within the federal government has been responsible for coordinating nationwide wellness and prevention efforts. Now, the new National Prevention Council provides coordination and leadership to all federal departments and agencies. The U.S. Surgeon General chairs the Council; membership is comprised of the 20 federal entities listed below:

- · Department of Health & Human Services
- · Department of Agriculture
- · Department of Education
- · Federal Trade Commission
- · Department of Transportation
- · Department of Labor
- · Department of Homeland Security
- · Environmental Protection Agency
- · Office of National Drug Control Policy
- · Domestic Policy Council
- · Bureau of Indian Affairs
- · Department of Justice
- · Corporation for National & Community Services
- · Department of Defense
- · Department of Veteran Affairs
- · Department of Housing & Urban Development
- · Office of Management & Budget
- · Department of the Interior
- · General Services Administration
- · Office of Personnel Management

This multisectoral Council underscores the paradigm of "health in all policies" in which nontraditional partnerships are forged to create policies and practices that promote health. Working together may also contribute to a cultural shift in non-health agencies to consider health when making policy decisions¹³. Much like economic impacts are considered in non-finance decision-making, health impacts should be analyzed when shaping policies in education, transportation or housing.

¹³ Rigby, E. How the National Prevention Council Can Overcome Key Challenges and Improve American's Health. Health Affairs 30:11 (2011). 2149-2156

Reorient public and political perception of disease prevention and wellness

Benjamin Franklin famously noted, "An ounce of prevention is worth a pound of cure." Although no one disputes such wisdom, the Partnership for Prevention outlines the reasons why disease prevention and health promotion have not been prioritized in the United States⁶:

- · The natural tendency to focus on the current crisis rather than future opportunities and issues
- · A lack of enabling infrastructure
- · Fragmented efforts when multiple individuals and groups work separately or on parts of an issue
- · Unrealistic expectations about the ability of new technology to obviate the need for rational decisions regarding the appropriate use of health resources

The first reason is particularly challenging. The costs of prevention are incurred immediately, but most of the benefits of reduced disease burden and medical care are realized in the future, sometimes over several years or decades.

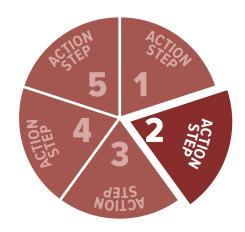
Nonetheless, we need to elevate healthy communities, prevention and lifestyle into an esteemed social value in America – in order to invest in our healthy tomorrow.

CONSIDERATION 4

Establish a White House Office of Wellness & Prevention

Through an Executive Order, the new President could establish a White House Office of Wellness & Prevention. Such an office would provide leadership to the Executive Branch in setting priorities, policies and objectives for a comprehensive effort to improve the health of this nation. The functions of the White House Office of Wellness & Prevention could include:

- Coordinating the development and implementation of the Administration and Congress' wellness policy agenda across executive departments and agencies, and prioritizing wellness as a key domestic policy
- · Overseeing improvements in coordinating prevention-related data and information technology
- · Promoting policies that foster environments conducive to adopting and maintaining healthy behaviors and obtaining recommended preventive services
- · Developing and disseminating scalable wellness frameworks based on best practice and sound scientific evidence



ACTION STEP TWO IMPROVE THE CURRENT HEALTH SYSTEM

The American health system, including both acute health care and public health systems, faces unprecedented pressures from multiple, intersecting forces. Many of the drivers of this transformation include, but are not limited to, the confluence of environmental factors ranging from¹:

- · Changing market conditions, projected workforce shortages and population demographics
- · Distribution of disease along with corresponding variations in access and quality by geography (i.e., where you live matters)
- · Shifts in values and accountability, and dissatisfaction with the status quo
- · Challenges in organizational and system performance
- · Rising expenditures or costs
- · Legal and regulatory changes
- · The uncertainty associated with existing reforms

In order to adapt to these external pressures, hospitals must move outside their walls to help improve the health and well-being of the communities they serve. Hospitals need not always take the leading role or be the only funders, but can engage in and provide strategic support to a web of community partners promoting health. They can serve as anchor institutions that share accountability for improved community health.

New Role of the Hospital in Public Health

Two decades ago, health providers and policy researchers discussed the reinvention of the American hospital to a new or emerging model that focused on "disease prevention, health promotion and primary

¹ American Hospital Association September 2011. "Hospitals and Care Systems of the Future." Committee on Performance Improvement; Jeanette Clough, Chairperson. Chicago: American Hospital Association.

care." In addition, many health care and public health professionals were actively searching for a better way to understand the interrelationship of the systems that create and sustain health, regardless of where a person lived. They wanted to align the clinical systems of care with public health and non-traditional determinants of health.

Around 2003, the term "Population Health" was introduced and defined as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group"³. The definition was later expanded to include two other important components⁴:

- 1. How we conceptually think "about why some populations are healthier than others, as well as the policy development, research agendas and resource allocations that flow from it."
- 2. "The health of a population as measured by health status indicators and as influenced by social, economic and physical environments; personal health practices; individual capcity and coping skills; human biology; early childhood development; and health services."

This broader definition helped provide a wide rationale for the term's use, expanding the concept from public health only and helping foster more agreement on the term.

Bringing clarity to an overarching focus on the total population's health – one that includes individuals, communities and organizations – sets the stage to address the performance gaps in our country's health system. Regardless of the controversy around the Affordable Care Act, it does aim to reinforce essential population health components.

Adding a community focus is helping hospitals move beyond a traditional role of acute care by shifting the health system's focus to include a distinct emphasis on primary and secondary prevention.

Stages of Prevention

- Primary prevention seeks to prevent the onset of specific diseases via risk reduction.
 Examples include smoking cessation, vaccinations and adding fluoride to tap water to prevent dental caries.
- Secondary prevention seeks to control disease progression. Examples include mammography to detect early stage breast cancer or routine blood sugar testing for people over 40.
- · Tertiary prevention seeks to soften the impact of disease after patient has been treated. Examples include cardiac rehabilitation or helping a cardiac patient lose weight.

² Shortell SM, Gillies RR, Devers KJ. 1995. "Reinventing the American Hospital". The Milbank Quarterly; 73(2): 131-160.

³ Kindig D, Stoddard G. 2003. "What is Population Health?". American Journal of Public Health; 93(3):380-383.

⁴ Kindig DA. 2007. "Understanding Population Health Terminology". The Milbank Quarterly; 85(1):139-161.

Create a clearly defined population health strategy for hospitals and communities that tackles the Triple Aim, including expanded concepts of access to, and the social determinants of, health

In 2008, the Institute for Healthcare Improvement (IHI) introduced the concept of the Triple Aim for achieving improvements in the U.S. health system. The Triple Aim requires simultaneous pursuit of three shared goals: "improving the individual experience of care; improving the health of populations; and reducing the per capita costs of care for populations." 5

Widely accepted by many health care leaders, organizations, communities and governmental entities as a framework for making health system improvements, the Triple Aim's adoption has been useful for priority-setting. It helps providers strive for simultaneous outcomes that have, in the past, remained somewhat elusive. Recent IHI reflections on the first seven years attest to its widespread dissemination and the requisite conditions for making essential progress in future endeavors.⁶

A Triple Aim-based population health strategy should not be created in isolation. It should include other health care entities and key stakeholders within a geographic locale, as well as regional partners who can help transform a community. In addition to helping to establish priorities, a sound population health strategy will allow for adequate planning, resource allocation, care management and service delivery options that ensure each person's health needs can be met in a timely, efficient and effective manner.

Population segmentation⁷ and risk stratification⁸ can have great benefit when coupled with the Community Health Needs Assessments (CHNA)⁹ required by the IRS for not-for-profit hospitals. With the first round completed, it is clear that later assessments will include a broader public health dimension by providing critical information not typically captured in corporate planning sessions.

CONSIDERATION 6

Seize opportunties for strategic realignment between hospitals and the public health system

Strategic realignments between hospitals and public health will build integrated approaches that foster shared frameworks of population health. Partners should leverage such alignments for determining common measurements and monitoring health improvement interventions.¹⁰

- 5 Berwick DM, Nolan TW, Whittington J. 2008. "The Triple Aim: Care, Health, and Cost". Health Affairs; 27(3): 759-769.
- 6 Whittington JW, Nolan K, Lewis N, Torres T. 2015. "Pursuing the Triple Aim: The First 7 Years". The Milbank Quarterly; 93(2):263-300.
- 7 Lynn J, Straube BM, Bell KM, Jencks SF, Kambic RT. 2007. "Using Population Segmentation to Provide Better Health Care for All: The 'Bridges to Health Model." The Milbank Quarterly; 85(2):185-208.
- 8 Care Continuum Alliance. October 2012. "Implementation and Evaluation: A Population Health Guide for Primary Care Models". CCA Quality and Research Committee; Jason Cooper and David Veroff, Co-Chairs. Washington, D.C.: Care Continuum Alliance.
- 9 Stoto MA. February 21, 2013. "Population Health in the Affordable Care Act Era." AcademyHealth: Washington, D.C.
- 10 Jacobson DM, Teutsch S. June 2012. "An Environmental Scan of Integrated Approaches for Defining and Measuring Total Population Health by the Clinical Care System." The Government Public Health System and Stakeholder Organizations. National Quality Forum: Washington, D.C.

Public health around national voluntary accreditation should seek alignment with health system of community assessments (and vice-versa), aiding in the transformation of public health practice.¹¹

CONSIDERATION 7

Rely on multisectoral collaborations to build effective community partnerships and a culture of health

With Community Health Needs Assessments, the not-for-profit hospital sector is playing a greater role in building a "culture of health."

The vision for a culture of health is eloquently presented by the Robert Wood Johnson Foundation (RWJF). ^{12,13} With RWJF, the Health Research & Educational Trust (HRET) of the American Hospital Association conducted a study on ways that hospitals and health systems might operate in this new role of creating a culture of health.

This report¹⁴ provides a range of strategic considerations for the hospital/health system, community and stakeholders/partners. Four key roles – Convener, Anchor, Specialist and Promoter – are hospital options based on the degree of collaboration and intervention that aligns with the organization's capacity and the community's needs. A number of similar roadmaps and briefings address hospitals' protential roles in population health, including provider perspectives.^{15,16,17}

Roadmaps to Health

Because a community's health is shaped by more than just access to health care, the Roadmaps to Health community grants program supports community-based efforts to break the cycle of poor health by improving education, financial opportunity, family stability and community safety. Roadmaps to Health is a partnership with the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

- 15 Health Research & Educational Trust. April 2012. "Managing Population Health: The Role of the Hospital". Health Research & Educational Trust: Chicago, IL.
- 16 Health Care Advisory Board Care Transformation Center. 2013. "Three Key Elements for Successful Population Health Management." The Advisory Board Company: Washington, D.C.
- 17 Institute for Health Technology Transformation. 2012. "Population Health Management: A Roadmap for Provider-based Automation in a New Era of Healthcare". Institute for Health Technology Transformation: New York.

¹¹ Russo P, Kuehnert P. 2014. "Accreditation: A Lever for Transformation of Public Health Practice." Journal of Public Health Management and Practice; 20(1): 145-148.

¹² Lavizzo-Mourey R. 2014. "Building a Culture of Health." President's Message: Princeton, New Jersey. Robert Wood Johnson Foundation.

¹³ Lavizzo-Mourey R. 2015. "In it Together-Building a Culture of Health". President's Message: Princeton, New Jersey. Robert Wood Johnson Foundation.

¹⁴ Health Research & Educational Trust. October 2014. "Hospital-based Strategies for Creating a Culture of Health". Health Research & Educational Trust: Chicago, IL.

Building the Right Incentive Structures

The financing and delivery structure of health care in the United States provides little incentive for insurers or providers to invest in disease prevention and health promotion. In our fragmented system, an individual's health insurance coverage changes routinely, depending on age, work status, marital status or income. Insurers have little incentive to invest in preventive services today that will benefit other insurers tomorrow.¹⁸

We have noted that our current national health investment focuses heavily on medical interventions rather than on strategies that address disease prevention or social and environmental conditions that affect the health of a population. The traditional "fee-for-service" reimbursement system pays physicians and hospitals for each procedure performed on a sick patient, financially rewarding quantity over quality of the care provided.

Current federal initiatives test and innovate models that shift away from traditional financing and delivery systems. The Medicare Shared Savings Program (MSSP) rewards participating health care organizations for engaging in high quality primary care activities, coordinating patient care, and taking steps to prevent unnecessary care. The Medicaid Incentives for the Prevention of Chronic Diseases (MIPCD) Program provides direct incentives to Medicaid beneficiaries of all ages who participate in tobacco cessation, controlling or reducing weight, lowering cholesterol, lowering blood pressure, and preventing or controlling diabetes.

Still, our challenge remains: aligning and sustaining incentives to produce better outcomes at a lower cost, and addressing the wellness of our country. Coordinating programs, policies and interventions into an integrated system will require partnerships that span roles, responsibilities, jurisdictions and sectors.

CONSIDERATION 8

Modernize provider reimbursement by moving away from volume and intensity and toward quality and value of services

It is essential that we change provider reimbursement from one focused on volume toward one focused on accountability for overall cost and quality. Many valuable services – such as patient education, effective preventive care and coordinated post-hospital care – are generally underprovided because doctors and hospitals do not have adequate financial or other support to provide them. A reformed system should support providers who provide primary care and reward value, quality and organized delivery of care.

CONSIDERATION 9

Expand health care coverage and reduce cost-sharing for patients who seek primary care and preventive services

People who lack health insurance are less likely to receive not only preventive care, but also treatment for

¹⁸ National Institute for Health Care Management Foundation. 2003. "Accelerating the Adoption of Preventive Health Services". Washington D.C. http://www.nihcm.org/pdf/prevention.pdf

major health conditions and chronic diseases.¹⁹ "Underinsured" people faced with significant out-of-pocket costs are also likely to forego both necessary and elective care. They often use hospital emergency departments for conditions that could and should have been treated in a primary care setting – driving up costs for businesses and other patients.

We urge consideration of health benefit designs that encourage patients to access and use cost-effective primary care, especially preventive services shown to delay or prevent the onset of chronic conditions.

CONSIDERATION 10

Attract and train more primary care physicians

Access to optimal disease prevention and wellness programs hinges on the availability of an adequate workforce to meet those demands. We need to incentivize medical schools to train more primary care physicians. It is also important to reevaluate physician compensation to encourage medical students to pursue a primary care specialty: family medicine, internal medicine, pediatric medicine, general surgery, and obstetrics and gynecology.

Highlight: Incentives for a Healthier Workforce

For many years, businesses have held an interest in keeping workers healthy, productive and satisfied – while working simultaneously to decrease health care and insurance costs. A national Harris Interactive Survey (2008) revealed that 91 percent of employers "believed they could reduce their health care costs by influencing employees to adopt healthier lifestyles." More and more businesses have offered incentives (and some, disincentives) to accomplish these goals.

Though tobacco use and obesity have garnered the most awareness and surveillance, efforts to manage blood pressure, high cholesterol, blood glucose and sedentary lifestyles have received similar emphasis. For example, Adventist Health System has been at the forefront in providing these incentives as part of its CREATION Health® program and has partnered with WebMD in this effort.

Effective workplace wellness programs can include all or some of the following:

- · Health screenings
- · No-smoking policies on and off the job
- · Cash incentive payments and gift cards
- Additional paid vacation days
- · Health savings account contributions
- · Reimbursement for gym memberships
- Free health coaching

¹⁹ Majerol, Newkirk, & Garfield. December 5, 2014. "The Uninsured: A Primer- Key Facts About Health Insurance and the Uninsured in America." The Henry J. Kaiser Family Foundation. http://kff.org/uninsured/report/the-uninsured-a-primer/

²⁰ Mello M, Rosenthal MB. July 10 2008. N Engl J Med.

- Insurance-premium discounts to those who meet health standards^{21,22}
- Non-monetary rewards can also be a cost-effective way to incentivize employees and sustain wellness
 programs over a longer period. Rewards can include verbal or visual recognition, coveted office or
 parking spaces, transportation, flexible work schedules, gym memberships and new technologies
 such as pedometers.

Incentivize businesses to invest in improving public health

Businesses can be powerful allies of local governments in improving public health. The right incentives offered by local governments can encourage business owners to invest not only in their fiscal growth, but also in new opportunities for physical activity and access to healthy, affordable food. Examples include the New York City FRESH Program, the Winter Park (FL) Health Foundation's "Healthy Central Florida" program, and Florida Hospital's "footprint" efforts in underserved communities.²³

CONSIDERATION 12

Foster a culture of health in the work environment

Businesses must create a culture of health in the workplace in order to increase employee participation in wellness programs and ultimately, personal health improvement. These efforts can include walking paths, workplace treadmills or healthy foods in cafeterias and vending machines.

CONSIDERATION 13

Offer well-designed, measurable worksite wellness programs

Scientific evidence suggests that some worksite wellness programs have been successful – or not. Employers should be encouraged to use evidence-based guidelines from entities like the Health Insurance Portability and Accountability Act (HIPAA) wellness program regulations, the Genetic Information Nondiscrimination Act (GINA), the American Cancer Society, Americans for Disability and others.

HIPAA requires the following for outcomes-based incentive programs:

- a. The total amount of incentives or penalties cannot exceed 30 percent of the total cost of employer-sponsored insurance coverage.
- b. Incentives can only be used as part of a wellness program that is "reasonably designed to promote health and wellness."
- c. Opportunities to qualify for incentives must be given at least once per year.
- d. Employers must offer a waiver or "alternative standard" if the employee is unable to meet the

²¹ Hand, Larry. 2009. "Employer Health Incentives". Harvard T.H. Chan School of Public Health. http://www.hsph.harvard.edu/news/magazine/winter09healthincentives/

²² Centers for Disease Control and Prevention. 2013. "Workplace Healthy Incentive". www.cdc.gov/nationalhealthy-worksite/

²³ Ogilvie RS. 2014. "Change Lab Solutions". http://www.communitycommons.org/2014/02

standards due to a medical condition or doctor's recommendation. Reasonable alternative standards or waivers must be defined in marketing materials that contain incentive qualifications.²⁴

The Joint Consensus (American Heart Association, American Diabetes Association, American Cancer Society, Health Enhancement Research Organization, American College of Occupational and Environmental Medicine and American Cancer Society Cancer Action Network) has also made suggestions for reasonably designed programs and reasonable alternative standard wellness programs.²⁵ Again, ethical considerations must assure transparency, non-discrimination, and adherence to evidence-based scientific data.

CONSIDERATION 14

Engage workers in long-term behavioral change

CONSIDERATION 15

Conduct more research into the long-term benefits of incentive programs

CONSIDERATION 16

Make effective incentives part of an overall employee health strategy, not the whole strategy

Incentives provided by successful workplace wellness programs can motivate employees to engage in wellness program specifics, start selected behavioral modification, and learn about health and wellness – but are not necessarily the whole answer.

Types of incentives include:26

- · Participation-based: Cash incentives or premium reductions for completing an annual health risk assessment or biometric screening
- · Outcomes-based (most preferred by business): Premium reductions for attaining and sustaining target ranges for body mass index (BMI), blood pressure, glucose and cholesterol levels
- Progress-based (rewarded for making realistic, meaningful progress toward specific health goals):
 An employee with a BMI of 40 setting a realistic weight loss goal of 10 percent body weight, instead of trying to achieve a BMI of 25 in a single year

²⁴ https://www.federalregister.gov/articles/2012/11/26/12-28361/incentives-for-nondiscriminatory-wellness-programs-in-group-health-plans

²⁵ Noyce J. AHIP Fall Forum 2012 Wellness Program and Compliance Considerations

²⁶ Noyce, Jerry. December 22, 2011. Finding Success with Progress-Based Health Incentives." Society for Human Resources Management. www.shrm.org/hrdisciplines/benefits/articles/pages/healthincentives.aspx

Evidence-Based Tools for Behavior and Lifestyle Interventions

Hospitals and health systems can rely on established, evidence-based tools for employer and community-based strategies that prompt behavior change, lifestyle modification and health engagement. Examples include:

- The Community Guide. The Community Preventive Services Task Force was created in 1986 to evaluate the efficacy of community health interventions. The Task Force is composed of 15 experts from public and private national organizations. Task Force members and CDC staff use proven scientific methods to rigorously review community based prevention programs around 12 diseases or community conditions. Programs are then designated as Recommended, Not Recommended, or Lacking Significant Evidence.
- The Community Health Improvement Navigator is a CDC database of expert-vetted population health interventions. The Navigator categorizes the interventions in 22 areas of disease, health behaviors, clinical care, socio-economic factors and the physical environment.

CONSIDERATION 17

Incorporate a Health Disparities Focus into Community Health Needs Assessments

Needs Assessments

Not-for-profit hospitals conduct Community Health Needs Assessments (CHNA) every three years to identify the health needs of their communities and develop collaborative, measurable strategies to meet these needs.

The IRS-mandated Community Health Needs Assessments (CHNA) call for input from "low-income, minority and other underserved populations" as well as the broad community. In order for the CHNAs to be effective vehicles for contextualizing community challenges, they must do more than view underserved communities though a collective lens. They must describe how specific communities are disproportionately affected by the current health state of a region. Health systems must take a deeper look at specific health disparities through a lens that highlights gender, sex, ethnicity, geography, income, race and related factors.

Overall, CHNAs give hospitals the opportunity to work beside community members and other stakeholders to prioritize and address challenges specific to the community. A collaborative CHNA encourages effective interventions with "shared ownership" for all partners.

Establish policies to reward hospitals that provide long-term community health programming

Hospital Community Health Needs Assessments are helping shift the focus of community health programming from isolated events such as health fairs to more structurally oriented programs. While health fairs may present the opportunity to show individuals that their BMIs are a risk or that their blood pressure is abnormally high, they typically fail to provide opportunities for individuals to act on that information. Additionally, health fairs typically lack the ability to provide continuity of care once a patient is aware of a health risk factor.

Initiatives that look at health determinants (as described later) have greater capacity to affect that community on a structural level. Seizing opportunities to make factors like transportation or leisure-time physical activity more accessible challenge the traditional methods of community health engagement – and have the potential to generate both immediate and generational effects on health status and risk.

CONSIDERATION 19

Collaborate with public health departments and community-based organizations (CBOs) to improve community health

Our nation's health challenges cannot be solved by one entity. Rather, partnerships that span roles, responsibilities and jurisdictions or sectors – and coordinate programs, policies and interventions to address these challenges – require a shift in traditional hospital thinking. Hospital community benefit activities must function collaboratively with regional public health entities if evidence-based practices are to be implemented effectively.

As previously noted, not-for-profit hospitals are required to conduct Community Health Needs Assessments every three years. In addition, county health departments must conduct community health assessments and develop regional health improvement plans in order to retain their accreditation.

Because the work and interests of public health departments and hospital systems overlap, collaboration among regional stakeholders is essential. Collaborative, collective processes help maximize programming specific to each partner's area of proficiency and minimize service duplication.

If health systems and public health are to create sustainable and engaging initiatives, they must also find ways to work with CBOs like United Way, food banks and others. By addressing issues in partnership with CBOs, health systems can empower entities that have already built trust within underserved communities.

CONSIDERATION 20

Engage community members as active participants in the health system

Health systems must create space for "people" in their program design and implementation. Creating such a space provides communities with a sense of ownership and oversight over projects. By empowering community members to get involved in programming, programs are more likely to be sustainable and to function in a manner that reflects the cultural norms of that community.



ACTION STEP 3

STRENGTHEN THE PUBLIC HEALTH INFRASTRUCTURE

The next President and Congress of the United States can play a vital role in strengthening our nation's crucial public health infrastructure.

The core functions of Public Health are to prevent epidemics and the spread of disease, respond to disasters, protect against environmental hazards, prevent injuries, promote healthy behaviors, and assure the quality and accessibility of health services. At the federal level, public health has remained relatively flat for many years, but state and local public health budgets have been cut heavily in recent years.

A 2014 Trust for America's Health report notes that a "sustained and sufficient level of investment in public health functions is essential to disaster preparedness and improving health in the United States."

In this chapter, we present strategies to strengthen existing infrastructures to promote the health and well-being of the nation.

Public Health Infrastructure

The transformational health system changes necessary for the future must effectively bridge (clinical) patient care with population strategies that use multi-sectorial approaches often found outside of the traditional delivery system. Nonetheless, this critical role of public health at the federal, state and local levels has historically been overlooked and under-appreciated in the national health policy debate.

The stakeholders responsible for overall health improvement include public health, employers, health plans, health professionals, institutional providers, community groups and voluntary organizations. Of these stakeholders, public health is the only entity specifically mandated to the following:

· Prevent disease, protect against injury and prepare for emergencies

- · Affect social, economic and environmental factors fundamental to excellent health
- · Train its workforce to gain insight about health improvement, health determinants and prevention
- · As the nation, together with most of its health systems, struggles to define population health and develop new infrastructures to support these efforts, the public health system must be included in the conversation.

Protect the Public Health & Prevention Trust Fund and public health infrastructure at all levels of government

Our nation's public health agencies are battling some of our greatest health challenges while struggling against consistent inadequate funding. As noted earlier, the mandatory Prevention & Public Health Fund set up for prevention and public health programs was the victim of recent federal budget diversions. The Prevention & Public Health Fund should be protected from further cuts to reliably fund public health infrastructure at all levels of government.

Our nation also needs to transform the roles and responsibilities of public health to meet future health challenges. Just as we are asking health care providers within the system to work at their highest level of credentials, we need to ask the same of our public health workforce. We must repurpose the role of public health to help health systems connect their health improvement strategies to local communities.

CONSIDERATION 22

Support policies that promote collaboration with the health system and public health sectors

The role of local public health directors and health officers should be redefined as Community Health Strategists whose duties include:

- · Promoting collaboration among all sectors
- · Improving communities' understanding of future possibilities including risks, challenges and opportunities
- · Articulating evidence-based strategies with greatest potential for public health advancement

CONSIDERATION 23

Support alternative funding structures and financial investments for prevention

We must initiate a clear focus on community and clinical prevention. Our history of treating illness alone has discouraged spending on behavioral, social and environmental conditions that constitute a large portion of the costs in health care. Furthermore, the traditional fee-for-service payment system rewards quantity of care rather than quality, and may have contributed to poor health outcomes in the United States.

We must better align clinical and community interventions to address chronic illness while applying evidence-based strategies for improving health. Four promising funding approaches include Wellness Trusts, Social Impact and Health Impact bonds, the IRS inclusion of community building as allowable

community benefit on Form 990, and support for the development of Accountable Care Communities within Accountable Care Organizations¹.

Successful investment opportunities require:

- · Targeted outcomes that are defined and achievable
- · Interventions that reflect best practices
- · Measured outcomes that are independently validated
- · Defined savings or return on value that are established
- · Public agencies, nonprofits, investors and community stakeholders who are incentivized to work together

CONSIDERATION 24

Incentivize new data systems that integrate clinical and community health data

In order to effectively treat the whole person, new data models must:

- · Incorporate geographically enabled clinical data and societal factors that impact health into the electronic medical record (EMR) for improved coordination and integration of care.
- · Support a new analytical framework to incorporate both clinical and community data.
- Incentivize health systems that incorporate the findings and priorities from their Community Health Needs Assessments into hospital strategy as well as align their community health process outcomes to outcome measures. Traditionally, clinical data is thought to be of specific, necessary, and of immediate value to patients, while population health data is viewed as general, nice to know, and long range. These competing or contrasting perspectives can no longer suffice in delivering the type or timely information required to run a large health system across a socially and culturally diverse, widely distributed "community."
- Create a new data voice that speaks of impact and results, not just process. Improving the processes
 that create, deliver and interpret data within the context of accountable care will require thoughtful
 and proactive modernization of the information systems and workflows that underpin its
 organization.

Collaborating with Nontraditional Partners

National research studies note that "zip code is more important than genetics and health care services." This presents a great challenge to hospitals and other health providers.

The complexity of the causal factors contributing to overall health presents an ideal opportunity for health systems to align with community partners to improve health. While it is not the role of the health care system to be the sole expert on economics, education and housing, the link between personal health and these factors clearly has a significant impact on the health of an individual and community. Since it would be quite daunting for the health care system to shoulder these issues alone, harnessing

¹ Cantor, J., Mikkelsen, L., Simons, B., Waters, R. 2013. "How Can We Pay for A Healthy Population? Innovate New Ways to Redirect Funds to Community Prevention." Prevention Institute.

the power of community groups, i.e. schools and faith-based organizations, to encourage health will be crucial. The key will be to identify vital partners and develop mutually reinforcing interventions and metrics of success.

CONSIDERATION 25

Reinforce ties between health systems and faith communities

Many U.S. health systems have origins in, and strong ties to, the faith community. Faith communities remain trusted community partners, and have effectively reached people in underserved communities through the strong infrastructure of congregations and community leaders. Faith communities can promote messages about healthy living, wellness, preventive care and chronic conditions that diminish the quality of people's lives.

CONSIDERATION 26

Strengthen the White House and other federal government Offices of Faith-based & Neighborhood Partnerships

With the thinking that faith and community groups are well situated to meet the needs of local people, the White House Office of Faith-based & Neighborhood Partnerships leads the efforts to support faith-based and community organizations in order to better serve individuals, families and communities in need. These entities can play key roles in supporting the collaboration of both health and social services.

CONSIDERATION 27

Reimagine school-based health centers to support students' health, well-being and academic achievement

In addition to faith communities, health systems need to align their success metrics with local schools. Health and education are strongly linked, yet both systems struggle to define effective collaborations and partnerships.

Millions of students throughout the United States attend schools in environments that do not adequately support health. One in four students has one or more chronic conditions, such as asthma or diabetes, that debilitates their ability to learn.² Incorporating health and wellness into the school culture is a crucial first step in reversing the decreased life expectancy of the current generation.

Funding for school-based health centers has traditionally come from a patchwork of revenue streams. Many centers are funded by traditional school financing sources such as local property taxes and formula-driven state revenue allocations to local school districts. Federal funding comes from various federal discretionary grants for school-based care, and from Medicaid payments for certain services provided to students in special education. It is time to redesign the collaboration between education and health and identify more sustainable funding sources.

² Lear, J. 2007. "Health at School: A Hidden Health Care System Emerges From The Shadows". Health Affairs. 26, no. 2: 409-419.

CONSIDERATION 28

Incentivize multiple community, business and education sectors to collaborate on improving overall community health by using metrics that reflect the priorities and values of the community

Public Health Workforce Development: Preventive Medicine Physicians and Public Health Professionals

In order to strengthen the wellness and prevention infrastructure, effective and sufficient workforce development in the fields of public health and prevention needs to take place. For example, there is still a shortage of physicians specialized in preventive medicine. The American Board of Medical Specialties requires these physicians to train in both clinical care and public health.³ Physicians trained in preventive medicine understand the balance between one-on-one clinical care and population health, placing them in a unique position to "promote and maintain health and well-being and reduce the risks of disease, disability and death in individuals and populations."⁴

In addition to preventive medicine physicians, there is a need to train and empower more public health professionals. The total number of public health workers in the nation ranged from 303,773 to 516,193 (2012 data, lowest to highest enumeration estimate, respectively). Of these professionals, 161,615 worked in local public health, between 66,846 and 110,547 worked in state public health, and 75,312 to 244,031 worked in federal public health agencies.⁵ In terms of training, the Council on Education for Public Health (CEPH), an independent agency recognized by the U.S. Department of Education to accredit schools of public health and public health programs, currently accredits 56 schools and 108 programs nationwide.⁶

In general, however, there has been a downward trend in the governmental public health workforce due to recent economic downturns and funding cuts. For example, it has been estimated that approximately 44,000 governmental public health jobs at the state and local levels—representing about 19 percent of the 2008 workforce—were lost between 2008 and 2010.⁷ In fact, the size of the public health workforce at governmental health agencies is estimated to have decreased by 50,000 since 1980 despite a 22 percent (50 million people) increase in population.⁷ In addition to decreased resources, the public health workforce struggles with inadequate training and inequitable distribution in areas of greatest need.⁷

- 3 American College of Preventive Medicine. (n.d.). Policy Issue Brief Preventive Medicine Workforce. Retrieved from http://www.acpm.org/?IssueBrief_Workforce.
- 4 Health Resources and Services Administration of the DHHS 2015. Justification of Estimates for Appropriations Committees. Retrieved from http://www.hrsa.gov/about/budget/budget/budgetjustification2015.pdf.
- 5 University of Michigan Center of Excellence in Public Health Workforce Studies 2013, July. Public Health Workforce Enumeration, 2012. Retrieved from http://www.phf.org/resourcestools/Documents/UM_CEPHS_Enumeration2012_Revised_July_2013.pdf.
- 6 Council on Education for Public Health 2015. Accredited Schools and Programs. Retrieved from http://ceph.org/accredited/.
- 7 American Public Health Association Center for Public Health Policy 2011, June. Issue Brief: The Affordable Care Act's Public Health Workforce Provisions: Opportunities and Challenges. Retrieved from https://www.apha.org/~/media/files/pdf/topics/aca/apha_workforce.ashx.

Current federal funding support for the public health workforce comes from Title VII of the Public Health Service Act, which is administered by the Health Resources & Services Administration (HRSA) of the U.S. Department of Health & Human Services.⁸ Title VII supports the following grant programs:

- 1. Public Health Training Centers (PHTC) Program, which funds schools of public health and other programs that provide graduate-level training in public health
- 2. Public Health Traineeship (PHT) Program, which provides grants to accredited institutions for graduate-level training in public health through traineeships
- 3. Preventive Medicine Residency (PMR) Program, which supports residency-level training for some preventive medicine physicians
- 4. Integrative Medicine Program (IMP), which supports a national center of excellence for integrative primary care

Title VII was renewed in 2010. In addition, the Affordable Care Act authorized a new mandatory prevention and public health funding stream in the form of the Prevention & Public Health Fund (Sections 4002, 10401). The law allocated \$500 million to the Fund in FY2010 with plans to gradually increase that amount each year, maxing out at \$2 billion per year in FY2015 and every year thereafter. However, only a portion of the money was used to support public health workforce development, and turned out to be one of the Act's vulnerable elements.

Because authorization does not always ensure fund appropriation, we ask the incoming President and Appropriations Committees to understand the importance of continued public health workforce funding in order to promote our nation's wellbeing. As the nation aims to focus on prevention and wellness rather than "sick care," we need a greater emphasis on ensuring sufficient workforce development in public health and preventive medicine.

CONSIDERATION 29

Increase federal funding for preventive medicine residency (PMR) programs to support at least half of the accredited positions

Most graduate medical education (GME) programs are funded by Medicare, Medicaid or other third-party payers.

However, preventive medicine programs do not receive GME dollars; their only federal funding comes through Title VII. Of the 661 accredited PMR slots, only 353 (or 53 percent) were funded, and Title VII supported just 55 residents in academic Year 2012-2013.⁴ The result is that PMR program directors have to seek creative ways to fund residency positions.⁷

There is a need for increased federal funding to ensure that the 72 PMR programs are able to run at full capacity for training preventive medicine physicians. We recommend that Title VII appropriations for PMR programs be increased to support at least half of the accredited positions (i.e., 330 positions), and that the federal government consider other ways to provide funding support for PMR programs.

⁸ Institute of Medicine (2007). Training Physicians for Public Health Careers. Washington, DC: The National Academies Press.

CONSIDERATION 30

Increase federal funding for other public health training programs

As we have noted, the size of the public health workforce at governmental health agencies has been decreasing despite an increase in U.S. population. Nearly nine of 10 (89 percent) state health agencies reduced services between 2008 and 2010 due to decreased funding and labor capacity. Many reductions affected health promotion programs.

Although there is little research on the effect of public health workforce shortages and reduced services on health outcomes, fewer services and service providers are likely to have negative effects on the health of communities.

CONSIDERATION 31

Create a national task force to recommend ways to enhance the numbers and quality of the public health workforce

The Council on Linkages Between Academia & Public Health Practice, a collaborative of 20 national organizations focused on improving public health education and training, practice and research, has launched the Public Health Training Impact initiative. It would be beneficial to work with the Council to create a national task force to come up with ways not only to increase the public health workforce, but also to improve the quality of training opportunities.

CONSIDERATION 32

Create a system for accurate and standardized collection of data on the public health workforce with projection analysis to estimate future need

Systematic collection of data on current public health workforce, along with reliable projection analysis, is needed. As noted in Consideration 28, an accurate enumeration of the public health workforce is challenging. In order to know how many public health professionals to train, we need a better sense of how many are currently available and how many are needed.

Although the current funding climate calls for cuts rather than additions, the federal government should be far-sighted and prioritize public health workforce development in order to build a healthy community made up of healthy people. The return-on-investment for prevention and public health may not be apparent immediately, but will come to fruition in due time.

Public Health Workforce Development: Allied Health

An essential element of public health is the assurance of a competent workforce. In addition to the physician shortage, there is a workforce shortage across all areas of health care: nursing, mental health, pharmacy, dentistry and 11 other allied health professions including occupational and physical therapy, radiation therapy, respiratory therapy, speech pathology and laboratory technology.⁹

⁹ Burrows, E., Suh, R. & Hamann, D. January 2012. "Health Care Workforce Distribution and Shortage Issues in Rural America." National Rural Health Association Policy Brief. Updated version of March 2003, 1-11.

These workforce shortages exacerbate the issues of availability and accessibility to primary health care critical to the maintenance of wellness and improvement of health. Continued innovation and efficiency are needed to address gaps in the way primary health services are delivered. For example, individuals with a regular source of primary care receive more preventive services, are more likely to comply with their prescribed treatments, and have lower rates of illness and premature death.¹⁰

CONSIDERATION 33

Be innovative in the recruitment and retention of allied health providers in Rural America

The U.S. population is projected to increase by 30.8 million by 2025, and the number of Americans over age 65 by 46 percent.¹¹ With this growing and aging population, the demand for physicians in both primary and specialty care has intensified.¹² This is especially the case in rural America where 20 percent of the US population live but only about 11 percent of the nation's physicians practice.¹³

The health care workforce shortage in rural areas applies to allied health professionals as well. Most health care professionals come from and are trained in urban areas and remain in these familiar surroundings to practice their profession. Policymakers should consider supporting "Grow Your Own" demonstration projects in rural communities including funding for the following:

- · Early identification and mentoring of highly prospective candidates to serve in rural areas
- · Financial support and/or loan forgiveness for living expenses, education and training beyond high school for selected candidates
- Ongoing community support as the candidate transitions to an urban setting for undergraduate and graduate education
- · Continued support as the student transitions back to the rural community following education in the urban setting

CONSIDERATION 34

Define clear and standardized roles for allied health providers

One nation's approach to meeting the health care workforce shortage while assuring quality of care is to examine the role of the non-physician provider – what care is delivered, by whom, in what setting and with what supervision. It is time to consider a redefinition and possible expansion of the scope and standards of practice based on standardized education, training and experience.

The visibility of allied health providers in public policy should be elevated. Standardized role descriptions and definitions including scope of practice for each allied health discipline would assure consistency and

¹⁰ Starfield, B., Shi, L. & Macinko, J. 2005. "Contribution of Primary Care to Health Systems and Health." The Milbank Quarterly 83(3), 457-502

¹¹ Ortman, J., Velkoff, V. & Hogan H. May 2014. An aging nation: The older population in the United States population estimates and projections. Current Population Reports. Retrieved August 24, 2015, from http://www.census.gov/prod/2014pubs/p25-1140.pdf

¹² AAMC. Retrieved August 5, 2015. "Fixing the Doctor Shortage". Government Affairs - Campaigns and Coalitions (n.d.).https://www.aamc.org/advocacy/campaigns_and_coalitions/fixdocshortage/

¹³ Cromartie, J. May 26, 2012. "Population & Migration." U.S. Department of Agriculture, Economic Research Service.

quality regardless of geographic (state, urban, suburban, and rural) location. Further, scope of practice laws should be regularly evaluated to assure consistency of skills and competencies for allied health. These skills would include diagnosis and treatment for low-acuity illnesses and chronic diseases, basic health needs, health maintenance and disease prevention. It would also include the ability to request consulting services as needed.

CONSIDERATION 35

Elevate and standardize educational training and licensing requirements for mid-level providers

Regulations to elevate and standardize the educational and licensing requirements for allied health providers should be considered. For example, pharmacists could serve as an invaluable resource to patients and families. The medication reconciliation process can be an overwhelming or impossible task for patients, but pharmacists could fill that role. They could bridge knowledge gaps created by multiple providers and multiple medications often prescribed in a vacuum.

CONSIDERATION 36

Develop standardized licensure and certification for allied health providers

The adoption of federal rather than state allied health licensure and registration systems could ease mobility across state lines and urban and rural locations, while assuring standardized competencies and quality of care.

CONSIDERATION 37

Create new reimbursement structures for allied health providers

New reimbursement structures for allied health providers practicing in expanded roles as defined by education and licensing requirements could help with workforce shortages.

CONSIDERATION 38

Design fair and meaningful data systems to evaluate comparative cost-effectiveness of allied health providers

Data collection systems to evaluate the comparative cost-effectiveness of allied health providers could provide increased and equitable access in all geographic settings.



ACTION STEP FOUR

MOVE TO PEOPLE AND COMMUNITY-CENTERED CARE – INTEGRATING MIND, BODY AND SPIRIT

"Place gives us a point of entry. It makes visible the concrete and specific social and physical contexts of our patients' lives, pinpoints social work needs and interventions, and helps us begin to identify, assess and measure the social determinants of their health."

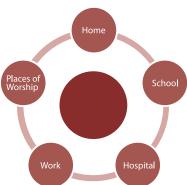
Health happens in us and all around us, including our physical and social environments. Moving to "people and community-centered care" requires a shift toward embracing the individual as a whole person – persons with social and physical ties to the communities in which they live, work and play.

People and community-centered care engages a multidisciplinary team of medical, behavioral, dental, long-term care and public health experts, as well as local clergy, friends and family. This interrelated group shares a common goal: to promote the wellbeing of an individual by connecting mind, body and spirit.

¹ Stakeholder Health. Health Systems Learning Group (HSLG). April 2013 Monograph. Retrieved from http://stakeholder-health.org/wp-content/uploads/2013/09/HSLG-V11.pdf

Recognize that Health Happens in Many Places

When we limit our understanding of health to activities within the walls of a hospital, we turn a blind eye to the existing infrastructure within our society that has the potential to create access to healthier lifestyles. These opportunities and resources for health are found where we live, work, learn, play and worship. The way that we connect individuals to each of these settings, as well as one setting to another, determines our health and that of the people around us.



Even though health is not confined to hospitals, hospitals play an important role in community-centered care. Hospitals are part of a larger public health network. This network is comprised of organizations and places – homes, workplaces, schools and places of worship – that have a specific role in nurturing health in the lives of individuals and populations.

Environmental conditions in the home (lead exposure, poor ventilation, lack of safety precautions, etc.) can affect health. The same is true for external conditions (safe streets, places of employment, access to grocery stores, etc.). The healthful design or redesign of homes and communities can influence activity and social interactions.

Because many people spend the majority of their time at work, the work environment can harm or benefit their health through chemical exposure, workplace ergonomics, stress levels, etc. An investment in employee wellness and prevention may lower employer and employee health care costs and insurance claims.² The Centers for Disease Control & Prevention (CDC) notes that employees with more risk factors, such as being overweight, smoking or having diabetes, cost more to insure.

Schools can incorporate basic health education to develop a foundation for healthy decision-making in the future. Studies show that children enrolled in poor quality schools with fewer health resources, more violence and a distressed school climate, are more likely to face worse physical and mental health later in life.³

Personal spirituality and attending places of worship help people remain healthy longer. Churches, synagogues and mosques can help build social support, a key factor in personal health.

CONSIDERATION 39

Incentivize institutions (banks, hospitals, etc.) to become anchor organizations for community health improvement efforts

In order for community-centered health approaches to thrive, lead organizations must assume the role of linking the different community entities and places together. A lead organization such as a hospital or public health department will most likely be the largest health institution in a community. Banks and other businesses can also lead community initiatives.

² Bureau of Labor Statistics (BLS). September 2014. "Charts from the American Time Use Survey." http://www.bls.gov/tus/charts

³ Huang, Keng-Yen PhD, MPHa, Cheng, Sabrina Baa, Theise, Rachelle PsyDa. 2013. "School Contexts as Social Determinants of Child Health: Current Practices and Implications for Future Public Health." Practice Public Health Reports, Supplement 3. Volume 128.

Thanks to the Community Reinvestment Act (CRA), financial institutions are taking steps to promote housing and economic opportunity for underserved groups by providing affordable mortgage programs, small business loans, community development financing, funding for non-profit housing, economic development programs, and the like. Not-for-profit hospitals serve their communities through Community Benefit efforts that address the health and social needs of all residents, including low-income, minority and other underserved populations.

We recommend incentives to encourage organizations to develop and implement community-centered care plans for the people they serve.

"Community and faith-based organizations are incubators for emerging and informal local leaders who are skilled negotiators and gatekeepers with access to the groups and individuals who know the unspoken history and culture of neighborhoods down to the block level."

Stakeholder Health, 2013

CONSIDERATION 40

Promote policies that create workplaces where health, safety and well-being is protected and promoted

CONSIDERATION 41

Ensure access to preventive care and treatment for common health problems

CONSIDERATION 42

Develop new strategies to equalize school resources

Not all schools are the same. Those in inner city and low-income neighborhoods many not have the same resources as their suburban counterparts. This includes the school's physical and structural environment (e.g., activity space, air quality and physical safety), health resources (e.g., availability of nurses and mental health professionals), school culture and climate (e.g., violence, bullying and academic values), and school composition (e.g., socioeconomic status and school size).

Highlight: Faith Communities and Health

Gallup estimates that 40 percent of Americans regularly attend religious services.⁴ This gives access to a vast number of people who already feel connected to places that represent hope and spiritual meaning,

⁴ Newport, Frank. December 2013. "In U.S., Four in 10 Report Attending Church in Last Week." Gallup Analytics. http://www.gallup.com/poll/166613/four-report-attending-church-last-week.aspx.

places that influence their world view and how they conduct their lives. Tapping into this social and spiritual core affords a powerful opportunity for integrating healthier lifestyles and communities.

There are at least five reasons to engage faith communities in promoting healthier lifestyles:

- a. Congregations are communities united by a worldview that is influenced by a unique theological framework. Central to the theology of most faith communities is the idea that humans are created in God's image. If channeled appropriately, this level of consciousness and responsibility can link to the importance of personal and communal health and motivate health improvement among congregants.
- b. Congregations are already structured for gatherings with subgroups that provide internal support. We find that most congregations gather together in their facilities at least once a week for worship and community support. This means that the infrastructure for mutual support and objective teaching is already in place. Creating a pathway to tap into and integrate access to healthier lifestyles is a logical and productive proposition.
- c. Faith communities pledge commitment, respect and reverence to God. They understand their responsibility to their Higher Being for physical, emotional and spiritual health. However, when it comes to personal health, people may not connect the importance of a healthy lifestyle to the way they care for themselves. There is an opportunity to guide congregations to a place of holistic accountability and intrinsic motivation that honors God through the way they care for themselves. Their accountability to God is core to engaging participation, change, perseverance and ultimately, a willingness to adopt healthy lifestyles.
- d. Congregations ascribe to a theologically integrated view of the human as one unit: Body-Mind-Spirit. "Theological integration" is the key operating statement. Faith communities ascribe to the importance of not separating the care of the spirit from the care of the mind and the body. However, they often struggle to find pragmatic ways to integrate health practices and personal accountabilities. To create change and movement, congregations must reach a consciousness level that recognizes their need to meet the needs of congregations and their communities. This creates an integrated theology that helps create access to healthier lifestyles.
- e. There is an untapped source of energy and resources within each faith congregation. Members of faith communities have a bent toward volunteerism and community service that, if channeled appropriately, can produce active participation in health initiatives. Many health providers and caregivers are active in faith communities and congregations, but may not be invited to bring their skills to their own faith communities. This is a missed opportunity for improving the health and well-being of the congregations and society. Hospitals and health care providers should be invited to be co-creators of healthier communities.

CONSIDERATION 43

Utilize hospital spiritual care departments to bridge conduits between hospitals and faith communities

CONSIDERATION 44

Raise social and theological consciousness that the health of the community is the responsibility of not only the hospital but faith communities as well

CONSIDERATION 45

Set accountabilities within hospital institutions that create pathways for faith communities to be empowered to own and promote healthier lifestyles

CONSIDERATION 46

Invest in advocates within congregations who can help integrate the work of hospitals with the calling of faith and health

Oral and Dental Health

A healthy smile normally reflects an individuals' robust physical, mental and social status. Recognizing this, the Surgeon General's first oral health report in 2000 acknowledged a "silent epidemic" of untreated oral disease in the U.S.⁵ and recommended that oral health be an "inseparable part of general health."

The definition of dental health is often limited to freedom from tooth decay and pain, and quantified as the number of teeth present. Oral health is a more inclusive definition that includes teeth, surrounding bones, and the soft tissues of the mouth and face. This definition aligns with the National Institute of Health's expanded definition, incorporating the World Health Organization's view that "health is a state of complete physical, mental and social well-being and not merely the absence of disease." ^{7,8}

Evidence links many systemic health conditions to manifestations apparent in the mouth, further supporting the intimate connection between the body and its parts. Specifically, diabetes and more than 200 other diseases and deficiencies can be readily identified by signs and symptoms in the mouth or saliva.

Costs associated with the lack of attention to oral health in America are significant. Between 2008 and 2011, \$2.7 billion was spent on non-traumatic dental-related hospital emergency department (ED) visits by Medicaid and uninsured patients. Today, an estimated \$1 billion is spent annually on non-traumatic ental-related ED visits.

- 5 National Institute of Dental and Craniofacial Research. 2000. "Executive Summary." U.S. Department of Health and Human Services, National Institute of Health.
- 6 U.S. Department of Health and Human Services. 2000. "Oral Health in America: A Report of the Surgeon General." Rockville, Maryland.
- 7 National Institute of Dental and Craniofacial Research. 2014. "Chapter 1: The Meaning of Oral Health." www.nidcr.nih. gov/DataStatistics/SurgeonGeneral/sgr/chap1.html.
- 8 World Health Organization. 1946. "Constitution of the World Health Organization." Adopted by the International Health Conference, New York: no. 2, p. 100.
- 9 Allareddy, Veerasathpurush, et al. 2014. "Hospital-based Emergency Department Visits Involving Dental Conditions: Profile and Predictors of Poor Outcomes and Resource Utilization." The Journal of the American Dental Association 145.4: p. 331-337.

In spite of this, oral health continues to receive far less attention than it should, and remains independent from general health care.

CONSIDERATION 47

Develop new methods for integrating oral health education into all homes, communities and primary care providers

In 2011, the Institute of Medicine (IOM) released two reports examining the progress of oral health in the United States. The IOM found that many people, including some health care professionals, remain unaware of the link between oral and general health. They also noted that factors and prevention methods for many oral diseases are relatively unknown in the medical community. Increasing collaboration in education models that establish closer connections between health care providers could help patients and communities.

CONSIDERATION 48

Develop an infrastructure that is interoperable, accessible across clinical settings, and enhances adoption of oral health core clinical competencies

The defined, essential elements of oral health core clinical competencies should inform decision-making by all types of health providers. While it is obvious that the mouth is an integral part of the body, preventive and restorative care has been limited to the community of dentists, dental specialists (i.e. oral surgeons, orthodontists, pediatric dentists, etc.), hygienists and assistants. This group of professionals is considered to be "outside" the general medical community. The result is that dentists and physicians, who are educated and practice separately, infrequently co-design comprehensive, measurable health promotion strategies and treatment plans.

CONSIDERATION 49

Modify reimbursement policies to more efficiently address the costs of implementing oral health competencies and provide incentives to health care systems and practitioners

Insurance companies routinely classify oral health as "independent and optional" benefits. As a result, employers are required to provide health insurance but not dental insurance. New policy direction, including the Affordable Care Act, has not helped. Dental health coverage is still considered an optional benefit, and adult dental care is excluded from the 10 Essential Health Benefits.

CONSIDERATION 50

Shift the national research emphasis and funding incentives toward health promotion and disease prevention, including dental care

¹⁰ Institute of Medicine and National Research Council. 2011. "Improving Access to Oral Health Care for Vulnerable and Underserved Populations." Washington, DC: The National Academies Press.

CONSIDERATION 51

Reduce oral health disparities

According to the Centers for Disease Control (CDC), dental decay, or caries, persists as the most common chronic disease in the United States. Complications from this preventable disease include pain, reduced function (eating and talking) lost productivity (at school and work), and a decrease in the overall quality of life. Those suffering most and at highest risk in the U.S. for poor oral health are children, the elderly, certain ethnic minorities and people with a lower socioeconomic status. They face barriers that include cost (lack of insurance) and provider shortages, especially in rural communities.

Mental Health

According to former U.S. Surgeon General David Satcher, MD, "There is no health without mental health."

Mental health plays a critical role in an individual's ability to maintain good physical health. Mental illnesses like depression and anxiety affect people's abilities to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery. To address the health of an individual, family or community without addressing mental health would be futile as they are closely connected.

One in four Americans experience mental illness in a year.¹³ The Affordable Care Act (ACA) requires that most individual and small employer health plans cover mental health and substance abuse services. Because of the law, most health plans must now cover preventive services, like depression screening for adults and behavioral assessments for children, at no additional cost.

The ACA has helped address mental health care, but gaps still exist. Below is a list of recommendations and proposed actions that could help fill those gaps and enhance America's mental health system.

CONSIDERATION 52

Incorporate mental health into primary care

Deliver mental health services such as mental health screening and management in primary care settings, including family practice, internal medicine, pediatric care and OB-GYN.

¹¹ Centers for Disease Control and Prevention. 2014. "Hygiene-related Disease." http://www.cdc.gov/healthywater/hygiene/disease/dental_caries.html.

¹² Lando, J., Williams, Marshall S., Sturgis, S., et al. April 2006. "A Logic Model for the Integration of Mental Health into Chronic Disease Prevention and Health Promotion." Preventing Chronic Disease. 3(2), A61.

¹³ National Institutes of Health, National Institute of Mental Health. (n.d.). Statistics: Any Disorder Among Adults. Retrieved March 5, 2013, from http://www.nimh.nih.gov/statistics/1ANYDIS_ADULT.shtml.

CONSIDERATION 53

Intervene early, especially with children

Intervene early with family members and caregivers, especially with children ages three to seven who show symptoms of Adverse Childhood Experiences. Increase funding to schools for community mental health workers and mental health assessments when poor performance or behavior is present.

CONSIDERATION 54

Create alternatives to institutionalization for mental health issues

The Urban Institute estimates that 64% of jail inmates have mental health conditions, and many more have substance abuse issues. By providing treatment and education to people with serious mental illness, we can reduce imprisonment and hospital emergency department visits. It is also important to expand Crisis Intervention Training for Law Enforcement so that patients can receive proper care and relieve the burden on the criminal justice system.

CONSIDERATION 55

Expand tele-psychiatry

Reach underserved and rural populations by expanding tele-psychiatry to primary care physicians and pediatricians.

CONSIDERATION 56

Move to patient-centered care for mental health issues

Move to patient-centered care where patients are educated, supported and held responsible for their emotional health. Patient-centered care requires partnerships among patients, providers, clinicians and family members.

CONSIDERATION 57

Address the social determinants of mental health

As we have noted, only a small percentage of our health is determined by the health care we receive. Rather, environment, lifestyle and socioeconomics determine much of our health. Education, eating habits, exercise and support systems are principal determinants of all health, including mental health. It is important to factor in these issues when treating a person with mental illness.

End of Life and Palliative Care

The World Health Organization defines Palliative Care as an approach that improves the quality of life of patients (and their families) facing life-threatening illnesses. It focuses on prevention and relief of suffering through the early identification, impeccable measurement, and whole-person treatment of

pain and other physical, psychosocial and spiritual problems.¹⁴

The clinical benefits of palliative care include improvement in quality of life, better quality of care with less aggressive end-of-life care, and less emotional distress. The economic and financial benefits include more equitable resource utilization, reversing the trend for additional hospitalizations, and use of the intensive care unit (ICU) at the end of life. It also reduces hospital readmissions and provides financial benefit to patients, hospitals and payers.

Over the past decade or so, the United States has experienced considerable progress in palliative care, despite significant remaining gaps, as evidenced by the following.

The number of hospitals deploying palliative care teams (generally consisting of specialty-trained physicians, nurses and social workers) now includes about two-thirds of all hospitals. Palliative care teams are found more commonly in not-for-profit hospitals and those who have more than 300 beds, although there is wide geographic disparity.¹⁵

There is growing public understanding and acceptance of the benefits of palliative and hospice care. In 2011, almost half of all deaths in the US occurred within a hospice program. There remains, however, a cultural reluctance to talk about death and plan for its inevitability. There are also suspicions that certain palliative practices for pain management and other symptoms may inappropriately contribute to, or hasten, death. The result is persistent under-treatment of pain for many end-of-life patients.

Our nation has complex and confusing incentives for both government and private insurance coverage for palliative care. The Medicare Hospice Benefit covers hospice services for more than a million beneficiaries. However, to elect this benefit, patients must forgo all "curative treatments" and solely select "comfort care."

The result is that many people are at heightened risk for poor quality, high-cost, end-of-life care. Those who are particularly vulnerable include infants and children with cancer or genetic and congenital diseases; people with multiple, complex, chronic, physical or mental disorders; and people with limited access to quality end-of-life care due to geography, income or lack of insurance.

Palliative care education is now required in U.S. medical schools, although the average total instruction time is just 17 hours over four years. Growing numbers of doctors, nurses, and social workers are obtaining specialty training and board certification in palliative care, but the anticipated demand far exceeds the projected need.

While there was a tripling of publications on end-of-life and palliative care between 1997 and 2010, there remains a paucity of research funding from both governmental and private sources. Palliative care accounted for only 0.2 percent of all NIH grants between 2006 and 2010.¹⁶

The Institute of Medicine (IOM) published a comprehensive report in September, 2014, entitled "Dying

¹⁴ Institute of Medicine. September 17, 2014. "Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life." National Academy of Sciences.

¹⁵ Morrison RS, MD, et.al. 2011. "America's Care of Serious Illness: A State-by-State Report Card on Access to Palliative Care in Our Nation's Hospitals." Journal of Palliative Medicine: Vol. 14, No. 10.

¹⁶ Hughes, MT and Smith, TJ. 2014. "The Growth of Palliative Care in the United States," Annu. Rev. Public Health, 35:459-75.

in America: Improving Quality and Honoring Individual Preferences Near the End of Life." This report asserts, "A substantial body of evidence shows that broad improvements to end-of-life care are within reach." The report goes on to explore the current status of palliative care in the US and concludes with the following five recommendations (abbreviated). 15

CONSIDERATION 58

Government and private health insurers, as well as care-delivery programs, should cover the provision of comprehensive end-of-life care for people with advanced and/or serious mental illness who are nearing the end of their lives.

CONSIDERATION 59

Professional societies and other organizations that establish quality standards should develop standards for clinician-patient communication and advance-care planning. The standards should be measurable, actionable and evidence-based.

CONSIDERATION 60

Educational institutions, credentialing bodies, accrediting boards, state regulatory agencies, and health care delivery organizations should establish the appropriate training, certification and/or licensure requirements to strengthen the palliative care knowledge and skills of all clinicians who care for people with advanced illnesses and nearing the end of their lives.

CONSIDERATION 61

Government and private insurance, as well as health care delivery organizations, should integrate the financing of medical and social services to support the provision of quality care consistent with the values, goals and informed preferences of people with advanced serious illness who are nearing the end of their lives. This should include implementation of a "Physician Orders for Life-sustaining Treatment" (POLST) program.

CONSIDERATION 62

Civic leaders, public health and other governmental leaders and agencies should engage their constituents and provide fact-based information about care of people with advanced serious illnesses. The goal is to encourage advance care planning and informed choice based on the needs and values of individuals.



ACTION STEP FIVE SUPPORT HEALTH IN ALL POLICIES

We urge the next President and Congress to embed health considerations into the policy-making processes across a wide array of sectors beyond the direct control of medicine.

"The environments in which people live, work, learn and play have a tremendous impact on their health. Responsibility for the social determinants of health falls to many non-traditional partners, such as housing, transportation, education, air quality, parks, criminal justice, energy and employment agencies. Public health agencies and organizations will need to work with those who are best positioned to create policies and practices that promote healthy communities and environments and secure the many co-benefits that can be attained through healthy public policy."

As a 21st century society, we are increasingly aware that the majority of health happens outside of the traditional health care setting. Beyond microbiology, genetics and quality of medical care are additional factors, such as socioeconomics, health behaviors and the physical environment. Together, they determine up to 80 percent of one's length and quality of life.²

While life expectancy for Americans has been increasing, those gains have accrued overwhelmingly to people with higher socioeconomic status.³ Still, inequalities in health are not limited to the poor.

¹ Rudolph, L. and Caplan, J. Public Health Institute. 2013. Health in All Policies: A Guide for State and Local Government. Retrieved from http://www.phi.org/resource=hiapguide

² County Health Rankings & Roadmaps. Accessed August 10, 2015. "Our Approach" http://www.countyhealthrankings. org/our-approach.

³ Olshansky. August 2012. "Health Affairs." Vol 31, #83.

Disparities run across all social classes and can be influenced by your zip code, ethnicity, gender and sexual orientation.

Social determinants of health are conditions in the environments in which people are born, live, learn, work, play and worship. Age also affects health, functioning and quality-of-life outcomes and risks.⁴ To address these social determinants, public health agencies, hospitals and other health organizations must rely on collaboration with non-traditional health partners. This includes partners in housing, transportation, education, parks, criminal justice and businesses who are best positioned to create policies and practices that promote healthier communities.

The Adventist Health Policy Association (AHPA) urges policy makers to establish policies that influence social and economic conditions and support changes in individual behavior that can improve health and be sustained over time. Policies can affect health through changes to:

- · Social factors
- · Economic factors
- · Physical environment

AHPA supports Health in All Policies: A Guide for State and Local Government created by the Public Health Institute, the California Department of Public Health and the American Public Health Association. The guide references five key elements crucial to health policies:

- · Promote health equity and sustainability
- · Support intersectoral collaboration
- · Benefit multiple partners
- · Engage stakeholders
- · Create structural or process change

Social and Cultural Factors

As we have noted, social and cultural factors like, race, education, religion and geographic location are interrelated with the health of individuals and their communities. These factors can affect the way people think about health and can influence behaviors and habits. How culture interacts with environment, economy and politics can also affect health.

Differences between racial and ethnic populations and between groups with differing socioeconomic status have been repeatedly observed across a wide range of health indicators⁵. Differing levels of access to schools, education, housing, safe living and opportunities for healthful living also affect the health

⁴ Office of Disease Prevention & Health Promotion. 2015. "Social Determinants of Health." http://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health.

⁵ Braveman, P., Egerter, Williams, A.J. April 2009. "Issue Brief 5 Race and Socioeconomic Factors." Robert Wood Johnson Foundation.

status of a people and populations.^{5,6}

For example, social and cultural factors influence childbirth through:

- · Culture's perception of appropriate age
- · How many children a family should have
- · Who should be involved in the pregnancy
- · Role of medicine in reproductive health
- · Where women should have their babies
- · Who should deliver babies

To improve the health of our communities, we need to improve the health all of our residents. Special attention should focus on at-risk individuals and communities.

CONSIDERATION 63

Create safe communities, free of crime and violence

CONSIDERATION 64

Create opportunities for social and civic engagement

CONSIDERATION 65

Support the healthy development of children and adolescents

CONSIDERATION 66

Create opportunities for high-quality and accessible education

Economic Factors

Income, housing and access to food play integral roles in the health of individuals and communities. For example, people with higher incomes may have more opportunities to live in safe, healthy homes and near higher-quality schools. They are also more likely to have healthier food options, time for physical activity and access to health care services. Conversely, people with low incomes are more likely to live in substandard housing or unsafe communities. Their communities may lack healthy food options, like fresh fruits and vegetables, and they may lack access to outdoor recreational facilities. In order to improve the health of all of our citizens, there should be efforts to increase the economic security of all of our communities.

CONSIDERATION 67

⁶ Miller, W. April 2009. "Beyond Health Care: The Intersection of Socioeconomic Factors and Health."

Include healthy-homes assessments in social service programs like Women, Infants and Children (WIC)

CONSIDERATION 68

Continue to expand Supplemental Nutritional Assistance Program (SNAP) benefits to include local farmers markets

CONSIDERATION 69

Expand opportunities for high-quality early childhood education and health programs

Built Environment

Today, physical inactivity and unhealthy nutrition are leading causes of premature death.⁷ In 2013, no U.S. state had a prevalence of adult obesity less than 20 percent, and 18 states had prevalence of obesity between 30 and 35 percent.⁸

For children ages 5 to 14,9,10 physical activity like walking or riding a bike to school has decreased from 48 percent in 1969 to 13 percent in 2009. Childhood obesity has tripled during the past three decades and the rise of type 2 diabetes among children has skyrocketed.

Much of this is related to the "built environment," an upstream determinant of health that either promotes or inhibits health. The built environment includes:

- · The physical design of buildings
- · Streets and their networks
- · Neighborhoods, towns and regions
- · Parks and recreational facilities
- Safety
- · Transportation systems
- Food access

Strategic and quality design of the built-environment incorporates a "health in all policies" approach

⁷ Lee, I-Min et al. "Effect of Physical Inactivity on Major Non-Communicable Diseases Worldwide: An Analysis of Burden of Disease and Life Expectancy." Lancet, 380 (2012), 219-29.

⁸ Physical Activity Centers for Disease Control and Prevention. 2015. "Obesity Prevalence in 2013 Varies Across States and Territories." Division of Nutrition, and Obesity.

⁹ Pucher, John, Bassett Jr., David R., Buehler, Ralph, Thompson, Dixie L., & Couter, Scott E. 2008. "Walking, Cycling, and Obesity Rates in Europe, North America, and Australia," Journal of Physical Activity and Health: 795-814.

¹⁰ National Center for Safe Routes to School. 2011. "How Children Get to School: School Travel Patterns from 1969 to 2009." Safe Routes to School National Partnership.

¹¹ Mohammad Siahpush Gopal K. Singh, Michael D. Kogan, "Neighborhood Socioeconomic Conditions, Built Environments, and Childhood Obesity," Health Affairs, 29 (2010), 503-12.

at its core. It helps communities foster healthy behaviors, minimize hazards, protect and improve quality of life and preserve the natural environment. These aspects are often missing in poor design and conventional planning.

Campuses, neighborhoods, towns and regions that focus on healthy built-environment policies do so through intentional visioning, planning and implementation.

The creation of an overarching national planning policy should be at the forefront of addressing community health needs. The policy should encourage health-promoting design specific to the community level and be goal-prescriptive. The policy should be broad enough to guide and incentivize health-focused planning, but flexible enough for localized design based on the needs of communities.

CONSIDERATION 70

Integrate community input into health improvement efforts

Communities must have a voice in the design process, ensuring context-sensitive design that is supported by the involved entities. Ensuring that individual projects are part of a broader and community-supported design strategy brings sustainability and consistency to community growth.

CONSIDERATION 71

Design communities to the needs and health of people

As we built our country around automobile use, we simultaneously engineered physical activity out of daily living. Community design should include elements like active building frontages facing the street, broad sidewalks and crosswalks, walk-sized blocks and connections and trees. Such design encourages walking, biking and other methods of active transportation. Designing to the scale and needs of a pedestrian creates healthier, more welcoming and economically robust environments than those designed solely to the function of a car.

CONSIDERATION 72

Develop a rich mix of uses and buildings

Urban planners and public health professionals understand that the way we design and build our environments influences our health outcomes.

Recognizing the inherent value of health-promoting places and human wholeness, there is a growing preference to live and work in walkable, mixed-use, transit-rich communities. Rather than segregating activities of daily living, mixed-use developments merge places of living, work, shopping, education and other uses that are appropriately interconnected and within walking proximity of each other.

In such a design, buildings mutually support each other economically, aesthetically and socially, while addressing local community needs. Mixed-use development not only reduces trip distances, congestion, development footprints and pollution but also encourages community interactions and benefits the local economy.

CONSIDERATION 73

Incorporate nature into community settings

Communities should incorporate the inherent health, wellness and economic benefits of trees, parks, useable greenways, plazas, paths or other accessible means of contact between nature and people. Communities should incorporate growth boundaries that are appropriately defined. This encourages strong and desirable towns that retain access to preserved open spaces. Design for memorable places of character that stimulate the local economy and support community interaction, belonging and wellbeing.

CONSIDERATION 74

Focus transportation on moving people rather than vehicles

Support transportation planning and policy that is focused on moving people rather than vehicles. This requires a shift from conventional road and parking design standards to more holistic approaches that promote health and increase quality of travel. It is important to ensure that the entire right-of-way is designed, constructed and maintained to provide safe access to all users. This means the incorporation of protected bike lanes, public transit and in-between connections proven to reduce traffic congestion, create jobs, strengthen the economy, increase access to health care, reduce transportation costs and increase safety and security.¹²

CONSIDERATION 75

Support multidisciplinary approaches inclusive of healthy design principles

Children living in poor neighborhoods with unfavorable built environments that lack sidewalks, parks, safe streets, access to healthy foods and are conducive to social isolation are up to 60 percent more likely to be obese than children not facing similar conditions.¹³

Supporting decision-making based on human health and wholeness would benefit population health, the economy, productivity and overall well-being, in addition to addressing the state of rising health care costs associated with preventable illnesses. The built environment is a physical expression of community and national values; it is health policy in concrete. It complements local, regional and national core visions for healthier communities.

Health-promoting design principles are found in "Complete Streets," "Safe Routes to School" and "Safer People, Safer Streets" initiatives. These initiatives can guide the transportation design efforts of the White House Office of Urban Affairs; state departments of Transportation, the CDC and the Federal Highway Administration. The next President and Congress should consider the enhancement of federal programs and funding streams that supplement core local, regional and state commitments to health-promoting design.

¹² Ferrell, Christopher E. 2015. "The Benefits of Transit in the United States: A Review and Analysis of Benefit-Cost Studies." Mineta Transportation Institute: San Jose, CA.

¹³ Mohammad Siahpush Gopal K. Singh, Michael D. Kogan, 'Neighborhood Socioeconomic Conditions, Built Environments, and Childhood Obesity', Health Affairs, 29 (2010), 503-12.

The National Prevention Strategy (of the Office of the US Surgeon General) promotes participation in prevention strategies among private and academic organizations, public health and health care partners and others.

On the municipal level, rather than the addition of standalone chapters on health, cities and counties should encourage health-improving philosophies throughout their general plans.

SEVENTH-DAY ADVENTIST HEALTH STUDIES

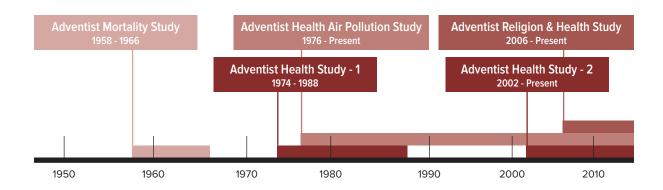
The Adventist Health Studies are long-term studies exploring the links between lifestyle, diet and disease among members of the Seventh-day Adventist faith. More than 96,000 church members from the US and Canada are participating in the current study, AHS-2, conducted by researchers at the Loma Linda University School of Public Health.

Seventh-day Adventists (Adventists) have increasingly become the objects of epidemiologic studies. Compared to the general population, Adventists tend to be more homogeneous in lifestyle choices and more heterogeneous in nutritional habits. Certain lifestyle behaviors among the general population, such as heavy cigarette smoking, alcohol consumption and diets heavy in fat may confound or modify the effects of other factors.

In the Adventist population, these potentially distorting characteristics are largely absent, making other factors more easily observed. Perhaps even more importantly, the wide range of dietary habits, from strict vegetarianism to a normal American diet, greatly enhances the ability of investigators.

This chapter describes the findings of various Adventist Health Studies.

Studies show that Seventh-day Adventists in California live longer than the general population.



Adventist Mortality Study: 1958-1966

The first major study of Adventists, begun in 1958, is known as the Adventist Mortality Study. This prospective study of 22,940 California Adventists was conducted at the same time as a large American Cancer Society study of non-Adventists. Comparisons were made for many causes of death between the two populations.

Key Results

Compared to other Californians, Adventists experienced lower rates of death for all cancers:

- · Sixty percent (of non-Adventist rates) for Adventist men
- · Seventy-five percent for Adventist women
- · Lung cancer (21 percent)
- · Colorectal cancer (62 percent)
- · Breast cancer (85 percent)
- · Heart disease (66 percent for Adventist men, 98 percent for Adventist women)

The risk of coronary heart disease was significantly lower in vegetarian compared to non-vegetarian Adventists. All-cause mortality showed a significant positive association with egg intake and a negative association with consumption of green salads.

Adventist Health Study-1 (AHS-1): 1974-1988

The second major study was designed to determine which components of the Adventist lifestyle give protection against disease. Over the course of the study, several questionnaires were mailed to 34,198 California Adventists.

In the beginning, AHS-1 was primarily a cancer investigation. In 1981, a cardiovascular component was added.

Key Results

- The average Adventist man lives 7.3 years longer and the average Adventist women lives 4.4 years longer than other Californians.
- · Vegetarians had a lower risk of obesity, hypertension, diabetes and death from all causes.
- · In men, the risk of fatal heart disease was significantly related to beef intake.
- · Regular nut and whole-grain consumption were associated with a lower risk of heart disease.
- · The risk of colon cancer increased by 88 percent in non-vegetarian compared to vegetarian Adventists.
- · Consumption of legumes (beans) had a protective effect against colon cancer.
- · Men with a high consumption of tomatoes had a 40 percent lower risk of prostate cancer.

Adventist Health Air Pollution Study (AHSMOG): 1976-Present

The AHSMOG Study is a sub-study of 6,338 California Adventists who were members of the parent AHS-1 study. It is believed this population (cohort) provides a unique opportunity for investigating the health effects of long-term exposure to ambient air pollutants with very little confounding (distortion) by active tobacco exposure.

Since 1977, the cohort continues to be followed and monitored for newly diagnosed malignant neoplasms, coronary heart disease and all-cause mortality.

Adventist Health Study-2 (AHS-2): 2002-Present

With 96,000 Adventist participants in the US and Canada, AHS-2 is one of the largest and most comprehensive studies of diet and cancer in the world.

It is also one of the largest dietary studies of black/African Americans and will help determine why this group has disproportionate rates of cancer and heart disease.

Adventist Religion & Health Study (ARHS): 2006-Present

ARHS is a sub-study of AHS-2 comprising 11,000 Adventist Americans who are members of the parent AHS-2. It has two goals: one, to understand the specific aspects of religion, life stressors and other health behaviors that account for better or worse health, and two, trace some of the bio-psychosocial pathways to health.

Key Results

- Data show a progressive weight increase in people who move from a total vegetarian diet toward a non-vegetarian diet. For example, 55-year-old male and female vegans weigh about 30 pounds less than non-vegetarians of similar height.
- · Levels of cholesterol, diabetes, high blood pressure and the metabolic syndrome all had the same trend: the closer a person is to being a vegetarian, the lower the risk in these areas. This proved true for both black and non-black participants.
- · High consumption of cooked green vegetables, brown rice, legumes and dried fruit was linked to a decreased risk of colon polyps, a precursor to colon cancer.
- · A vegetarian diet was not associated with lower levels of vitamin D. Other factors, such as amount and intensity of sun exposure, had a greater influence on vitamin D levels in blood than diet.

Recommendations

The following recommendations are based on the results of these long-term epidemiological studies. Many of the recommendations reflect the 75 Considerations noted earlier in this book.

Goal: Encourage Smoke-free Lifestyle and Living Spaces			
Actionable Steps: National	Actionable Steps: Community	Actionable Steps: Health Systems/Hospitals	
 Support smoking cessation services available under the Affordable Care Act Support states, tribes and communities to implement tobacco interventions and policies 	 Implement programs to reduce youth access to tobacco products Enforce no-smoking ordinances in cities and enact laws that restrict sale of tobacco products near schools 	 Use evidence-based recommendations to counsel patients on tobacco cessation and deleterious effects of second-hand exposure Reduce or eliminate patient out-of-pocket costs for cessation therapies 	

Goal: Improve Healthier Nutritional Options and Accessibility				
Actionable Steps: National	Actionable Steps: Community	Actionable Steps: Health Systems/Hospitals		
Create economic incentive programs (e.g., tax credits, grants, loans and others) to attract grocery stores to underserved neighborhoods	 Strengthen land-use and zoning regulations to expand community gardens and farmers' markets to vacant, city-owned land or unused parking lots 	1. Promote the baby- friendly hospital initiative that disallows formula discharge bags (unless there are contra-indications for breastfeeding)		
2. Mandate strong nutrition standards for foods and beverages available in government-run or regulated after-school programs, recreation centers, parks and child care facilities	2. Incentivize schools to provide healthy cafeteria options and eliminate high-calorie, lownutrition drinks from vending machines	2. Give patients evidence-based research on wellness programs and the health benefits of fruits, nuts and vegetables		

Goal: Support Social Systems and Community Partnerships			
Actionable Steps: National	Actionable Steps: Community	Actionable Steps: Health Systems/Hospitals	
 Include community-building as allowable community benefit Support studies that examine health literacy factors in patient safety and health care costs 	 Partner with health systems to conduct Community Health Needs Assessments (CHNAs) and develop community health improvement plans Promote diverse community involvement in built environments 	 Create patient linkages to community resources (e.g., tobacco quit lines and education programs) Partner with elected officials, academia, local businesses, faith-based leaders and community organizations on community health improvement plans 	

BEST PRACTICES IN POPULATION HEALTH

Adventist Health

Combining the Best of Traditional Medicine with Evidence-based Lifestyle Medicine and Whole-person Care

St. Helena Hospital in northern California is part of Adventist Health, headquartered in Roseville California. The hospital's TakeTEN Program shows how a personal lifestyle prescription, coupled with medical care nutrition, fitness and spirituality can lead to health.

St. Helena Hospital's TakeTEN Program has helped more than 1,000 people in northern California and across the United States. TakeTEN supports a full spectrum of medical care from disease prevention to slowing the progression of chronic conditions.

By addressing chronic disease lifestyle risk factors, such as lack of exercise, poor nutrition and tobacco use, this 10-day intervention empowers individuals to improve the quality of their lives and reduce or eliminate their need for medication.

TakeTEN begins with a physician-directed medical assessment and comprehensive diagnostic testing that explores the individual's genetic vulnerabilities, environmental stresses, health habits and nutritional deficiencies. Participants are then prescribed 10 custom "fit health" habits that include a diet of flavorful meals, an individualized exercise regimen, tools to reduce stress and make positive health behavior change and long-term success centered on spirituality.

TakeTEN simultaneously addresses core medical needs and treats the most complex chronic conditions, while introducing behavioral changes that result in improved health outcomes. On average, TakeTEN participants experienced a:

- · Twenty-nine percent reduction in fasting blood sugar level (among those with diabetes)
- · Ten-day tobacco quit rate of 99 percent and a 12-month quit rate of 57 percent
- · Thirty-four percent reduction in inflammation for participants with lupus and other conditions
- · Fifty-seven percent reduction in the number of medications for people taking more than one medication, or a reduced dosage of medications
- Reduction of 5.21 pounds in body weight, 1.02 inches in waist circumference and 3.39 pounds in body fat for those with waist circumferences at or above 40 inches
- · Thirty-two mg/dL reduction in total cholesterol for those with elevated total cholesterol
- Twenty-four mg/dL (or 17 percent) reduction of LDL cholesterol for those with elevated low-density lipoprotein
- · Ninety-four mg/dL reduction in triglycerides for those with elevated triglycerides
- · Fourteen percent reduction in systolic blood pressure for those with elevated systolic blood pressure
- · Twenty percent reduction in diastolic blood pressure for those with elevated diastolic blood pressure

TakeTEN is also part of the Adventist Health employee health benefit plan. Its carrier, Blue Shield of California, reported a 50 percent return on investment (or \$453,876) for the first 147 employees, 12 months after participating in the TakeTEN Program.

The next steps for TakeTEN are to expand the program by training additional health care providers and support-group leaders, developing web applications and publishing TakeTEN toolkits offering wellness education and long-term health behavior change. The web application will include health habit and health outcome tracking for research data collection, along with lifestyle medicine risk-screening tools using TakeTEN health habits and diet scores and interactive support with Lifestyle Coaches and program alumni.

St. Helena Hospital's TakeTEN Program focuses on the "cause of health" versus simply addressing the "cause of disease" that often leads contemporary medicine to chase symptoms. TakeTEN helps individuals obtain their optimal health by making whole-person wellness easy, and engaging participants as active partners in improving their own health.

Adventist HealthCare

Ensuring Delivery of Population-based Care and Promotion of Health Care Equity

Adventist HealthCare's Center for Population Health & Equity offers community outreach and health programs to improve cancer rates, cardiovascular health, diabetes and other health conditions, especially among minority and vulnerable populations. Adventist HealthCare is headquartered in Rockville, Maryland.

The Adventist HealthCare Center on Health Disparities was established in 2007 to help achieve health equity in the communities served by the hospital system. The center offers innovative programs that address hospital and community health disparities and outcomes through research and education, health programs delivery and community health and outreach.

- · Internal Disparities Monitoring. The center annually monitors health care disparities among AHC's patient population. The monitoring informs research and efforts to improve quality, expand access and deliver population-based care to all populations.
- · Breastfeeding Support for Black Mothers. The World Health Organization promotes exclusive breastfeeding as a means of reducing infant mortality and contributing to the health and well-being of mothers. Still, breastfeeding rates remain low in the black community, even though this population has the highest infant mortality rate. The center established a community-based, peer-led Black Mothers' Breastfeeding Club in partnership with the African American Health Program at the Montgomery County Department of Health & Human Services. Based on a model developed by the Black Mothers' Breastfeeding AssociationTM, this program provides a culturally relevant, community-based forum to support new mothers. Participants are encouraged to bring their babies, older children and supportive partners.
- · Breast Cancer Navigation for Underserved Women. The Navigate to Health rapid referral program is a partnership among Adventist HealthCare, the Montgomery County Women's Cancer Control

Program, the Primary Care Coalition of Montgomery County and local safety net clinics. Its goal is to provide comprehensive breast care services to medically underserved, low-income, uninsured women in Montgomery and Prince George counties. Through this program, comprehensive breast care services have been provided to nearly 2,000 medically underserved, minority women each year since 2010. Navigate to Health has now received private foundation funding to help steer underserved women through screening, diagnosis, follow-up and treatment.

• Project BEAT IT! Disease Management. Funded by the National African Immigrant Project of the US Office of Minority Health, the goal of this pilot project is to help improve chronic and infectious disease management and health outcomes in the African immigrant community. The specific focus is on people with HIV/AIDS, hepatitis B or type 2 diabetes. Adventist HealthCare has developed cultural competency training for health care providers working with African immigrant patients as well as patient-education modules to promote successful disease management among African immigrants. Patient goals include the improved knowledge of health conditions and treatment, increased medication and treatment adherence and fewer unplanned medical visits.

The Center on Health Disparities works to improve access to quality health care, especially for minorities, women and people who have language barriers or other communication needs.

Adventist Health System

The New Role of Hospitals: Engaging Community Partners to Transform a Forgotten Community

Florida Hospital is part of Adventist Health System and is located in Orlando, Florida. The hospital's work in the Bithlo Transformation Effort demonstrates a collaborative, multi-sectorial approach to a very low-income community with multiple health, social and environmental issues.

For most of Bithlo's 8,200 people, a semi-rural community near Orlando, generational poverty has been the norm for nearly 80 years. Residents have struggled daily with basic survival needs: food, clothing and shelter. Jobs are scarce, and the major industry is junkyards. There is no grocer, barbershop, library, gym, swimming pool or place to earn a general equivalency degree. Housing consists largely of dilapidated trailers. The nearest bus stop is miles away. Many adults are functionally illiterate, teen pregnancy rates are high in girls ages 13 to 15, and substance abuse is rampant. With no public water or sewer, residents' well water is contaminated with elements from an eight-acre illegal landfill, an old gas station and dozens of junkyards.

In August 2009, a small 501c3 entity called United Global Outreach (UGO) sparked the Bithlo Transformation Effort, which focuses on education, environment, transportation, health care, housing, basic needs and a sense of community. UGO first opened the Orange County Academy, a private school serving the unique needs of Bithlo's children.

In 2011, Florida Hospital adopted Bithlo as a local mission effort project. The hospital supports UGO's mission of "transforming forgotten communities into places in which we'd all want to live." Instead, the

hospital committed to support UGO – not take over or insist on "the hospital way." Florida Hospital leveraged its relationships with its construction, fire system and other vendors to donate services to the community.

Along with 65 other partners, Florida Hospital has provided some funding but has leveraged its business, community and political partners to help with the transformation effort. Since 2011:

- · With financial assistance from Florida Hospital and others, UGO is building the three-acre "Transformation Village." The Village provides a town center and sense of community for Bithlo.
- · Transformation Village elements include the school, a coffee shop, a hydroponic community garden, community meeting space, a commercial kitchen, a library, a computer lab, adult-education opportunities and more.
- · The first "tiny home" for the new Dignity Village has been purchased.
- The first permanent medical clinic now serves more than 2,200 patients per year.
- · Community partners provide much-needed dental, vision and mental health services.
- · The county government committed to constructing seven miles of sidewalks.
- · The Florida Department of Transportation is widening a dangerous pedestrian bridge.
- · Bus service has been restored.
- · The regional planning council is pursuing federal funding to clean up the environmental issues.
- · Hospital departments have provided hundreds of hours of volunteer time.
- · The hospital serves as the fiscal agent for several grants.

In 2009, the 8,200 residents of Bithlo's two census tracts accounted for more than 4,000 Emergency Room visits. Many of these visits were for non-urgent conditions that are now addressed in the community's new Health Center.

Bithlo's health and social issues still loom large, but there is a broad commitment to addressing the root causes of poor health – the physical, built, economic and social conditions – and supporting the Bithlo Transformation Effort.

Kettering Health Network

Building a Culture of Wellness and Health

Kettering Health Network is based in Dayton, Ohio. Kettering works to embed a wellness culture into both internal and external services and programs.

Community: Kettering's 20-member health outreach team serves the community through events, screenings, educational opportunities and service projects. This hands-on group helps people of all backgrounds to improve the quality of their lives. In 2014, this team touched more than 20,000 people with their care and service. The program continues to grow and activities have doubled over the past year, helping the hospital expand its footprint outside hospital walls and into the community, providing health and wellness where people live and work.

Corporate Wellness: Outreach to the business community is a second arm of Kettering's mission and wellness strategy. While wellness efforts have been in place for many years, the hospital has created a more strategic approach that consults with local corporations to help them determine the health of their populations and create their corporate health cultures. Kettering is taking health care out to the business community and providing extensive wellness screenings, education and care delivery in the workplace. The goals are to help improve quality of life and extend the hospital's healing mission.

Employees: Kettering's employees are part of the hospital community and the community-at-large. The hospital has intentionally identified the 10 percent who are the sickest and at highest risk and is providing care-management support to these employees and families so that they can return to their maximum level of health. The greatest needs and risk areas within the Kettering family are diabetes, cardiac issues and depression. The hospital conducts screening programs throughout the year and provides education to help people obtain the knowledge and resources to keep them at optimum health. Fitness challenges and sports leagues keep the process both educational and fun. In addition, most facilities feature access to a gym or some fitness equipment.

Loma Linda University

Bringing Diversity to the Health Care Workforce

The Gateway to Health Professions Program at Loma Linda University Health engages and prepares local Latino, African American and Native American youths for educational success and careers in health care. Loma Linda University Health is located in San Bernardino County, California.

Located about 90 minutes east of Los Angeles, San Bernardino County is the largest county in the United States. It has one of the highest Latino populations in California, with Latino residents making up 51 percent of its population.¹ Although Spanish-language billboards and grocery stores abound in San Bernardino, the same level of diversity is not readily visible within the health care system. Only five percent of physicians are Latino.

Physicians from racial and ethnic minorities are naturally prepared to address language barriers, improve cultural competency and practice in medically underserved communities. They are also equipped to understand the cultural beliefs that affect a patient's ability to access services or follow doctor's orders.

Still, few minority students pursue medicine, in part due to a lack of health care role models. In San Bernardino County, where only 18 percent of adults graduate from college, minority students see even fewer examples of academic success or role models.

Loma Linda University Health's first health careers pipeline program targeting Latino youth is called Sí Se Puede ("Yes You Can"). It began with 20 students in the summer of 2005 with two goals: reducing racial disparities in health care and growing a diverse health care workforce representative of the community served.

In 2012, Sí Se Puede was combined with comparable programs designed for African American and Native American students and renamed the Gateway to the Health Professions program (Gateway Program). By its 10th year, 451 students from 50 high schools have participated in the program.

In the program, students:

- · Learn about health care careers in Loma Linda's eight professional schools
- · Hear about faculty and staff's own journeys and experiences
- · Participate in different interactive health career presentations
- · Attend college preparation classes in financial aid, study skills, and the like
- · Prepare group research presentations
- · Participate in a day of community service to encourage a sense of direction and responsibility

For many students, the Gateway Program has opened students' eyes to academic success and helped them realize their interest in health care careers. The program continues to track its alumni and, at Loma Linda alone, 18 students have already completed their professional and doctoral programs.

Loma Linda University Health's Gateway to Health Professions Program prepares students for academic success, provides guidance in the college admissions process, and exposes them to opportunities in health care. For many racial and ethnic minority students in the area, the program helps them discover health careers about which they were not previously aware gain mentor opportunities. The program also supports their efforts to pursue health care careers.

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